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ABSTRACT

The third document in a series of special papers released by the Project on the Global Economy and Higher Education in New England is presented. The paper examines the causes and manifestations of change toward internationalization at New England colleges and universities and the extent to which change is linked to the coming of the global economy. Information is in two sections as follows: (1) the impact of economic globalization on higher education: the quickening internationalism of higher education; five causes of change; and (2) patterns of change in New England: comprehensive planning and integrative structures; the internationalization of business education; the liberal arts and economics; internationalization in the academic disciplines; foreign language and the area studies (the Asia phenomenon, other world areas, and reinforced interest in Canada); New England and the ocean; foreign students and study abroad, including internships abroad; and New England library resources. Two broad sets of findings emerge. One is that there is lively change along the international dimension at every one of the more than 40 institutions examined, indicating that internationalization is becoming one of the most powerful substantive developments in the history of American higher education. Another is that while both New England's economy and New England's colleges and universities are becoming increasingly more international, these developments have been on essentially parallel tracts, weakly connected. (SM)

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NEW ENGLAND BOARD OF HIGHER EDUCATION

THE IMPACT OF ECONOMIC GLOBALIZATION ON HIGHER EDUCATION

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New England Board of Higher Education

Staff Paper Number III
December 1987

A Regional Project on the Global Economy
and Higher Education in New England

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FORWARD

THE PROJECT ON THE GLOBAL ECONOMY AND HIGHER EDUCATION IN NEW ENGLAND

The New England economy is today the most robust in the nation with the lowest regional unemployment rate and highest level of personal income in the United States. In terms of international markets and investments, New England is one of the most intensive regions in proportion of products dependent upon export trade. Between 1980 and 1985, direct international trade in New England doubled to more than $30 billion making New England's economic future tied increasingly to the global outreach and competitive capacity of the region's knowledge-intensive economy.

In the Spring of 1986, the New England Board of Higher Education voted to endorse a significant regional initiative, "The Project on the Global Economy and Higher Education in New England." The program grows out of the Board's blue-ribbon Commission on Higher Education and the Economy of New England which found that engaging higher education as an international resource is one of the most important ways of positively influencing the economy of the region.

New England, as many of the region's political and corporate leaders have emphasized, has a growing need for internationally aware citizens. According to the most recent Annual Survey of Manufacturers: Origin of Exports, New England is one of the most export-intensive regions in the United States. Connecticut (15 percent), Massachusetts (13.8 percent), and Vermont (14.8 percent) collectively representing approximately 80% of regional manufactured products, all top the U.S. average of 11.3% in percent of exported industrial goods and rank in the top seven among all states.

In a 15-page survey of New England aptly titled, "A Concentration of Talent," The Economist (Aug. 8, 1987) credits the New England economic

"miracle" to its successful mix of industries and its entrepreneurial spirit. According to the article, New England "is a region bursting with entrepreneurs, people looking for opportunities to risk money working for themselves." Other states continue to examine New England to understand and subsequently adapt for themselves what they see as the nation's most significant model of economic revitalization.

Peter Drucker, noted philosopher of management, asserted in a recent issue of Foreign Affairs that New England, together with West Germany and Japan, is "the one great success within the United States." Drucker praises New England's "turnaround and rapid rise" as an industrial success from an economy that was once "widely considered moribund."

Today, the level of direct foreign investment in New England also ranks high and is growing. The region's university research and development programs, and skill in technology transfer are highly regarded throughout the world. Yet, addressing internationalization in New England requires a carefully coordinated economic, political and educational effort. A gap exists between the region's educational realities and what is needed to achieve economic competitiveness, including public understanding. The public, nationally and in New England, is largely unaware of the role that economic affairs between the United States and its trading partners plays in the vitality of the domestic economy.

The impact of international competitiveness on state and local economies and family budgets has created concern among Americans at the same time they have welcomed the quality and price advantage of imported products. Today, 80 percent of all American-made goods compete with international rivals. Half of the revenues of U.S. advertising firms and one-third of "Big Eight" accounting firm fees are derived from overseas.

The higher education community must bring a new creative vision to the broad and culturally significant dimensions of the international marketplace. A particularly dramatic reflection of the problem is the national and regional decline in the study of foreign languages in our colleges: Recent reports indicate that the number of bachelor's degrees awarded in foreign languages dropped 49 percent in the past decade. Only recently have we begun to see a significant renewal of emphasis on the importance of language study.

The accelerating process that is internationalizing higher education in New England, although in many respects innovative, remains characteristically piecemeal and competitively uncoordinated. While traditional campus-abroad programs abound and international studies are expanding, they remain unlinked to international economic realities and to new corporate developments in New England. The international programs of state government agencies in tourism, trade missions, manufacturing exports and financial services are unfamiliar to most professors of international studies. Foreign consulates and international visitors in New England find the region's complex array of educational initiatives bewildering. Those with whom we have had discussions, however, are open to creating imaginative working arrangements, and express considerable awareness of the necessity for a coordinated New England program and the essential role higher education will play.

Within higher education, international knowledge must become part of both general and professional studies. After years of mounting specialization within academic disciplines, the integration of an international economic perspective is necessary. Sven Groennings has pointed out that leaders in academia and government, especially state government, need fresh rationales and intellectual linkages to economic realities and problems.

The regional economy is increasingly integrated with international markets and investments, and at the same time grows more knowledge-intensive,

producing innovative technological goods and services in ever-widening circles of international competition. New England's sophisticated professional services sector is becoming international in scope. These are major changes at the cutting edge of regional economic development. Historically, higher education has adapted and contributed powerfully to changes in society, the economy, technology and national priorities. At issue now is how the relationship between the internationalization of the economy and the development of higher education's capabilities can be advanced most constructively in an era of global competitiveness. New England should take the lead.

During the past 18 months, the New England Board of Higher Education has investigated and analyzed the dimensions of internationalization of the New England economy, the international programs and resources of higher education within the region and the historic and current role of New England's colleges and universities.

Melvin H. Bernstein has conducted the economic analysis for the project; Richard King has reviewed the international student patterns of the region; and Sven Groennings has developed the first comprehensive regional overview of the "ubiquitous" level of change which today pervasively influences the development of academic planning throughout the region.

"The Impact of Economic Globalization on Higher Education" is the third in a series of special papers released from the Global Economy Project. Others will follow throughout the 1987-88 academic year with the belief that a compelling regional vision of the new role colleges and universities must play in international affairs and economic development is essential to the future well-being of New England.

John C. Hoy
President
New England Board of Higher Education

EXECUTIVE SUMMARY

The challenge of the global economy extends to the role of higher education in preparing people to participate effectively and in ensuring that students understand the global economy's features and importance.

This paper examines the causes and manifestations of change toward internationalization at New England colleges and universities and the extent to which change is linked to the coming of the global economy.

The approach is comprehensive, covering institutional planning, business and liberal arts curricula, foreign language and area studies, the internationalization of the academic disciplines, foreign students and study abroad programs for American students, and library resources.

Two broad sets of findings emerge. One is that there is lively change along the international dimension at every one of the more than 40 institutions examined, whether it be public or private, large or small. A conclusion is that internationalization is becoming one of the most powerful substantive developments in the history of American higher education.

The second broad finding is that while both New England's economy and New England's colleges and universities are becoming increasingly international, these developments have been on essentially parallel tracts, weakly connected.

The New England evidence establishes that the internationalization transition on the campuses is still taking shape or, in some cases, is embryonic, and that there are initiatives toward adaptation to the global economy. Therefore this is a time of extraordinary openess to consideration

of how to make the most appropriate connections between global economic change, the competitiveness of the American economy, and the international aspects of American higher education.

This is an interim paper, developed as part of a larger project on New England's higher education in a global economy undertaken by the New England Board of Higher Education.

ACKNOWLEDGMENTS AND SOURCES

This paper has been prepared as part of a broader project on New England's higher education in a global economy.

Corporate support for the larger project has been provided by AT&T, Bank of Boston, Bank of New England, Boston Globe Corporation, and The Henley Group.

This paper is based on discussions with approximately 200 academic experts and administrators at more than 40 New England institutions of higher education. In almost all cases initial contact was by letter from the president of the New England Board of Higher Education, John C. Hoy, to the college or university president or chancellor, asking for names of appropriate people to contact on his or her campus. The number of contacts was expanded from this base, usually at the recommendation of those initially contacted. The overwhelming majority of these discussions were telephonic.

Colleges and universities included were: Babson College, Bates College, Bentley College, Boston College, Boston University, Brandeis University, University of Bridgeport, Brown University, Bryant College, Bunker Hill Community College, Central Connecticut State University, Clark University, Colby College, University of Connecticut, Dartmouth College, The Fletcher School of Law and Diplomacy, University of Hartford, Harvard University, Keene State College, Lesley College, University of Maine, Massachusetts Institute of Technology, University of Massachusetts/Amherst, Middlebury College, New England College, University of New Hampshire, Northeastern University, Norwich University, Quinnipiac College, University of Rhode Island, Saint Michael's College, School for International Training, Simmons College, Smith College, University of Southern Maine, Tufts University, University of Vermont, Wellesley College, Wesleyan University, Williams College, and Yale University.

Also reflected in the text are contacts with Arthur D. Little Management Education Institute, Cape Cod Community College, Center for Northern Studies,Five Colleges, Inc., Plymouth State College, Wang Institute of Graduate Studies, and Woods Hole Oceanographic Institution.

Many people expressed a wish to learn about programmatic developments at other institutions which might provide ideas for their own planning. Hopefully this paper will be helpful toward meeting their needs.

THE IMPACT OF ECONOMIC GLOBALIZATION ON HIGHER EDUCATION

> History shows that great economic and social forces flow like a tide over communities only half conscious of that which is befalling them. Wise statesmen foresee what time is thus bringing, and try to shape institutions and mold men's thoughts and purposes in accordance with the change that is silently coming on. The unwise are those who bring nothing constructive to the process, and who greatly imperil the future of mankind by leaving great questions to be fought out between ignorant change on one hand and ignorant opposition to change on the other.
>
> - John Stuart Mill

The quotation frames the problem: New England's economic internationalization is one of those quietly rising tides of fundamental change, but are its colleges and universities adapting their curricula and activities to provide the new understanding and competencies required in the global economy?

What really is happening on the campuses? Are they becoming significantly more internationally oriented? What kinds of changes responsive to the global economy are and are not occurring? Are there patterns of programmatic development, and are there common barriers to adaptation? Is the campus vision sufficiently encompassing?

Answering these questions has involved discussions with approximately 200 faculty experts and administrators at more than 40 New England colleges and universities. In complement to this field study, the New England Board of Higher Education conducted survey research, asking New England corporate, government and higher education leaders what are the most important ways in which higher education can prepare our work force for a global economy.

The leading reply of all three groups--corporate, government and higher education--was: "Design an undergraduate curriculum that ensures understanding of a global economy.[1] While that is not happening anywhere, and probably is an idea whose time has come, there are many new developments on New England campuses.

The quickening internationalization of higher education

Phenomenally, there is change along the international dimension at every one of the institutions included in this study, whether it be public or private, large or small. Viewed as a whole, this change is profound. The evidence strongly suggests that internationalization, which is based on a new understanding of what is relevant, is becoming one of the most powerful substantive developments in the history of American higher education. Internationalization is so strong a development that the closest parallel may be the scientific revolution. Each represents a permanent redirection of the intellectual framework and pervades virtually the full range of academic fields. Like the early scientific revolution, internationalization lacks orderly process or agreed-upon definition, yet is similarly moving along a massive front.

Gaining momentum, it also is progressing quickly. By comparison, the debate in New England over studying classical versus modern languages lasted a century and ended as a policy issue within living memory. During that century,

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[1] The survey is reported in Staff Paper Number Two, Economic Competitiveness and International Knowledge (1987).

the academic response to the first industrial revolution was uncertain, slow and fumbling. Given this age in which global information systems accompany the knowledge-based, technological and global economy, one expects rapid change in higher education. This paper indicates that changes of many kinds have been occurring in just the last several years.

The paper also provides solid evidence that academic institutions perceive that the global framework for the U.S. economic, technological and political future applies also to the educational sector and that international perspective and activity have become essential to the academic mission. There is a limit to the number of issues and to the expenses that colleges and universities can handle at any time, but, among the many concerns to be addressed, the shaping of the international focus is emerging at the substantive forefront.

The internationalization now occurring is still taking shape. It is clear, from the New England evidence, that this is a time of searching for intellectual frameworks, program models, and substantive concentrations and approaches appropriate to different institutions; people are speaking of a search for "niches." There is also openess to new connections between disciplines and between academic institutions as well as with corporations. It is a remarkably propitious time to be contemplating connections between global economic change, the competitiveness of the American economy, and the international aspects of American higher education.

Yet the internationalization of the economy and the internationalization of higher education have been on essentially parallel tracks, weakly connected.

The few programmatic exceptions to this generalization are at the cutting edge of developments. This paper reports them in the context of the major patterns of change in the internationally-focused curricula and activities of

higher education institutions in New England.

Five causes of change

The internationalization of higher education has at least the following five causes:

(1) the international economic transformation: It has been said that "Toyota is the Sputnik of the 1980's," and there is much and varied evidence that the internationalizing of the economy is having an impact on higher education. This is not to say that, in turn, higher education is meeting the challenge of the global economy.

Nonetheless, economic change is the most powerful among the causes of the current broad internationalization of curricula, activities and student interest at colleges and universities. It is an increasingly common rationale for developing international perspectives in academic programs. It is energizing the push for a global rather than a dominantly European perspective in international studies. It is the primary reason for increased student enrollment in international business courses and in international relations courses in the liberal arts, as well as of the resurgence of foreign language learning. The most dynamtic world area relationships of New England colleges and universities generally parallel those with the greatest dynamism in the economic relationship: East Asia, particularly Japan, and Canada.[2]

As a cause of internationalization in higher education, economic transformation is a second wave, following global political-military aspects of national security. It is becoming the larger wave, because it is being

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[2] These are the two world areas that are also investing in New England academic institutions to develop these relationships. Similarly, the strength of Venezuelan studies at the University of Connecticut is related to support from Venezuela.

felt in all parts of the country as an everyday reality as local stores increasingly market foreign goods, doing American business means doing business with the rest of the world, and numerous professional fields are involved. The breadth of the economic impact on the country is causing international education to undergo a shift along three fundamental directions:

- First, its rationale is moving beyond the predominant emphasis on national security toward a vigorous emphasis on economic change and international competitiveness, with increasing focus on the business curriculum.
- Second, it is edging away from Washington centeredness toward additional urban centers whose focus is more heavily economic, such as Boston and Seattle, Philadelphia, Atlanta and Hartford, that is, toward nation-wide local interest alongside nation-state national interest.
- Third, it is moving beyond the production of experts, whose supply obviously will continue to be essential to national foreign policy capabilities, and toward general education for informed citizenship and all the professions.

The contrast to long-established programs is sharp. The Fulbright Program focuses on expertise, area studies programs create it, and technical assistance programs have provided expertise to other countries. These programs primarily function at the doctoral and professional levels. The globalization of the American economy is moving educational concern beyond specialized professional levels. Attention is shifting from graduate education to undergraduate education, and internationalization has become

important not only at the institutions educating toward expertise but at higher education institutions generally. There used to be two ideological extremes of advocacy for international education, one driven by concerns about national security, the other by humanitarian considerations. Economic change, which has made the international local, has transcended these advocacies and broadened international education's scope and constituency. One might have expected what this paper reports: new activity along the international dimension at every one of the colleges and universities contacted.

(2) a series of reports at the national level: three kinds of recent reports have advocated international education in a variety of contexts: those from the Association of American Colleges, the National Endowment for the Humanities, the National Institute of Education, the American Association of State Colleges and Universities, and the Carnegie Foundation for the Advancement of Teaching, whose concern is the quality and relevance of undergraduate education; those from the Business Higher Education Forum, whose focus is largely other issues of competitiveness such as tax and trade policy, support for research, worker retraining and overcoming illiteracy; and those which focus on the development of international education broadly, most notably President Carter's National Commission on Foreign Language and International Studies. In the history of American higher education, never before has there been such a rush of reports.

(3) accreditation standards requiring international content in the curriculum: The standard of the American Assembly of Collegiate Schools of Business, whose development began in the mid-1970s, is discussed later in this paper. Recently there has evolved an accreditation standard of the National Council for the Accreditation of Teacher Education, in cooperation with the

American Association of Colleges for Teacher Education, the thrust of which is that international education should be considered a fundamental part of basic education and that global perspectives should permeate all aspects of a teacher education program. It came into force for accreditation visits beginning July 1, 1987.

(4) internationalization of the academic disciplines: There is evidence everywhere, albeit occasionally nascent, of a pervasive and increasing internationalization of the disciplines. The disciplines are often the gatekeepers of educational change, and it is in the disciplines that faculties, curricula and research are based. Basic changes in the curriculum do not occur until faculty in their disciplines are ready to implement them. The spate of recent reports at the national level might just indicate a top-down fad, but the internationalization of the disciplines indicates a bottom-up trend.

(5) increased interest of academic administrators, students and faculty members: Internationalization is progressing because all three of the human elements--leaders, students and faculties--are advancing it. At a great number of New England institutions there has been a rise to leadership of people with international experience who are committed to international education. These people are defining the vision, leading the planning and directing the change.

This phenomenon is coinciding with a rapid growth in the number of incoming and currently enrolled students who have traveled abroad, envision internationally-related careers, and, whatever the reason, expect their educations to have an international component. Great number of administrators and faculty members mentioned that students want international perspective

in their coursework.

In parallel, the faculties have become more international in their interests. At least as much as people in other walks of life, they have traveled and read about and discussed international events and circumstances. Growing numbers have studied abroad and been exposed in their own studies to increasingly internationally oriented professors and mentors. Along with this accumulative effect there is to some extent a status "pecking order" associated with international activity: international opportunities increase with the level of faculty achievement; the greater is the activity of a department, typically the more internationally oriented its faculty becomes, with the major research universities having become pervasively international in perspective, activity and professional contacts. On many campuses there has been faculty interest in offering internationally focused topical courses. On some campuses, the international exposure of the younger faculty members has been considerably greater than that of the more senior members. It is more frequently the younger people who are inclined toward a global perspective, moving attention beyond the traditional European focus and toward concentration on Asia, as befits a faculty generation which experienced the Vietnam War and for whom the opening of China and the emergence of Japan as a global economic power provide the prospect of new opportunities. Almost everywhere the most acceptable and desired area of faculty development, in addition to the acquisition of computer skills, is in the international domain. Many colleges and universities are utilizing overseas centers and federal contractual relationships as means of advancing the internationalization of their faculties. It is the changing vision of the faculties that is internationalizing the disciplines and shaping the curricular future.

PATTERNS OF CHANGE IN NEW ENGLAND

Comprehensive planning and integrative structures

In New England there is a strong new trend toward comprehensive planning and providing integrative structures in order to shape the international dimensions of institutions coherently and systematically. These are very important developments. They nurture overall vision, create an international ethos, and focus the commitment, energies and priorities of the institutions. Strategic planning and the central focusing of responsibility lead to careful examination of options and to catalytic effects, including innovation. They change internal processes, creating new patterns of decision-making and support. They also signal a need and an openess to new directions.

This new stage of development builds on a natural base and an evolutionary process which we will quickly review. In neither principle nor practice is there anything fundamentally new about the idea of an international perspective in New England colleges and universities. Internationalization is grounded in the very idea of a university: the university probes and teaches about the universe of phenomena and ideas; it is universal in the intellectual and scientific interests, as well as in its service. Theory and method, science and scholarship transcend national boundaries.

Nonetheless, most of our colleges and universities were not very cosmopolitan until after World War II. They "went international" as the United States became a world power, as faculties focused on world problems, and as literally millions of foreign students came to American campuses. An expansion of American enrollment from 2 million to 12 million across the last 40 years made it possible to expand the curriculum and greatly increase

international offerings.

Federal policy was catalytic and fundamentally important in these developments. The Fulbright program has enabled more than 60,000 Americans and more than twice as many foreigners to study and teach in countries other than their own. The National Defense Education Act and subsequently the Higher Education Act have provided support for language and area study programs focusing on world regions. The Agency for International Development has provided major contracts involving universities in technical assistance. In parallel, major foundations also provided funding for international projects and the development of campus-based expertise. Thus there has been accumulative momentum behind the development of international capabilities.

Different now are the universality, pervasiveness and clearly quickening pace of internationalization, which is now powerfully reinforced by the ease of global communications and by connections to the many needs associated with involvement in a global economy. At an accelerating rate, international programs are encompassing schools of business, engineering, agriculture, public health, education, and other units as well as the traditional bases in colleges of arts and sciences. International perspective is becoming relevant in all fields, and increasingly there are international opportunities for New England's colleges and universities.

The range of New England institutions' international involvements is stunning. Yale University is host to 500 foreign researchers and senior scholars, and Clark University's 550 graduate students include students from more than 70 countries. The University of Massachusetts has participated in seven technology exhibits in Europe. Boston University, under contract with the U.S. Army, operates graduate programs at 12 overseas sites. Recent publications provide orientations to "Colby and the World," "Dartmouth in the

World" and "Tufts and the World."

Tufts University has announced that it "is examining how international activities interrelate and can be strengthened, and how the more complex interdisciplinary projects, often in the multimillion dollar range, should be organized." Tufts has more than 50 international programs and projects. Each of its seven colleges is involved internationally, and the University has charged each of the seven deans with responsibility for developing the international dimension. Tufts' activities range from a new China Exchange Program to a veterinary medicine project in the Sahel and providing postgraduate professional education in periodontics and orthodontics in Europe for French, Italian and Spanish dentists. Thus activities have gone far beyond those associated with its prestigious graduate-level Fletcher School of Law and Diplomacy. International activities at Tufts are funded at more than $5.5 million yearly and have an impact on research, curriculum development and public service. Tufts envisions study abroad for all of its undergraduate students and operates a Tufts European Center at Talloires. In the 1980s, Tufts has become an entrepreneurial and visionary international university. In 1987 it is contemplating "whole cloth" the issues of management, coordination, priority and ways to build on its new strengths and make new connections so that the whole will not be, as some institutions are finding, less than the sum of the parts.

Comprehensive thinking and planning are occurring at institutions public and private, large and small. Following are brief reviews of such activity at the University of Massachusetts, the University of Connecticut, Central Connecticut State University, Harvard University, Boston College and Bentley College. Differing in history, mission and resources, these institutions offer a variety of perspectives and approaches:

The University of Massachusetts, Amherst, in 1986-87 did a landmark cost/benefit analysis as a framework for linking program planning and resource allocation for the University's international involvement. Survey research on the campus provided quantitative indicators of international involvement, and a great number of interviews added qualitative components to the analysis. Approximately a third of the faculty were identified as engaged in significant international involvements and about half of all courses as entailing a substantial degree of international content. A random sample of undergraduate students indicated overwhelmingly positive receptivity to international dimensions:

- 97% value the university's international involvement
- 97% regard study abroad as desirable; 36% intend to study abroad
- 95% value the presence of foreign teachers, scholars, and students
- 77% enjoy relationships with foreign students
- 65% have travelled outside the U.S.
- 42% have studied a foreign language on campus
- 32% have taken courses on international themes.

The 200-page study, The Whole is Greater than the Sum of its Parts, also sets forth these perspectives:

- The industrial, technological, and social trends toward an increasingly global economy for Massachusetts support the further internationalization of UMass/Amherst's educational and research programs. The reality of an international economy pervading the state and region supports the view that the more the university internationalizes, the more it is serving the best interests of the Commonwealth. Just as business corporations have become multinational, so must higher education institutions.

- The emergence of the global knowledge community in the U.S., New England, and Massachusetts compels the Commonwealth's flagship university to become a prominent participant.
- In the context of the globalization of the local economy, the benefits and costs generated across the activities of UMass/Amherst increasingly will be evaluated according to international criteria.
- Costs versus benefits for FY 1986: The cost estimate was $2.5 million. The major components of this total include direct and allocated expenses for faculty travel abroad, international exchange programs, foreign faculty support, area studies, foreign assistantships, the International Programs office which includes 12 professional and 9 support staff, and library acquisitions. The benefit estimate of $5 million consists of tuition and on-campus revenue from foreign students and international grant and contract awards. This "income" omits such qualitative benefits as the faculty's professional development, the students' educational experience, and the overall reputation of the University.

The leading recommendation is that international involvement should be a prominent feature of the University's mission statement, particularly regarding the scope of scholarly research, the content of curricula and courses, and experiences for student development. The report includes a 9-point draft mission statement intended to be suitable for adoption by the Board of Trustees and the University Faculty Senate.

Twenty-one additional recommendations ranged from providing international development grants for innovation, establishing international excellence awards, and encouraging greater cooperation and programming between area studies and the academic disciplines, to providing better housing for

visiting scholars and improved orientation and services for foreign students and foreign teaching assistants.

An overall conclusion is that "Higher education institutions claiming or aspiring to the highest quality in teaching and research are inevitably increasingly international."

The University of Connecticut in 1986 produced an extraordinary report, written by a vice president who was provided a semester of release time to undertake a comprehensive review of the university's international programs and make recommendations. The resulting 170-page document is surely one of the most thorough and insightful, critical and constructive, ever produced on internationalization at an American university. An underlying perspective is that the University as long as 20 years ago had taken initiatives which would have made it a leader in international studies, yet did not fulfill their potential either as coordinating mechanisms or, in some cases, in area studies. Consequently the 1986 analysis focuses on lessons learned regarding the structural requisites of internationalizing the University successfully. A central thesis is that excellence cannot be achieved without a coordinating structure which transcends the academic departments, has a clearly delineated role, and has the budgetary resources to negotiate program integrity for area studies and other internationally-focused programs across the academic departments. The report also addresses: study abroad; the conditions of attracting superior foreign students; weaknesses in infrastructure support, especially housing for visiting foreign faculty, of which the University has approximately 90 per year; the potential of linkages with universities visited on several continents; and what needs to be done to become more successful in winning worldwide contractual relationships. The report concludes with a proposed table of organization and outline of seven functions which might be

associated with a strong Dean for International Studies. The university has decided to proceed toward implementing most of the recommendations. It expected to consolidate all international programs under the coordinating office by September, 1987.

Central Connecticut State University established an International Affairs Center in 1986-87 with support from the Connecticut Board of Governors for Higher Education's Fund for Excellence. There is a director who is a member of the president's cabinet, and an International House. In its comprehensive proposal to the Board, the University said "international education is an idea whose time has come" and we must set forth a plan to make it a distinctive dimension of the University's academic program. This plan had been developed by a presidential advisory committee. Components include increased foreign language study, expansion of overseas experiences for students, exchange agreements with foreign universities, increased focus on research, and major public service and outreach activities. The rationale was closely linked to the State of Connecticut's signing of a major trade agreement with Shandung Province of the People's Republic of China and to the establishment of the Connecticut World Trade Center in Hartford as indications of the University's need to develop international academic programs and help the state to expand its international trade. It was linked also to the relevance for the country and for the students: "The importance of the knowledge of the world in which we live and other cultures, languages, peoples and customs cannot be overstated if our nation is to continue its position of leadership and effectiveness. The practical impact of the continuing expansion of American business into foreign markets and foreign business into the American economic scene provides continued career opportunities for educated young people who have an international exposure and an international perspective. Thus, we

continue to expand this dimension in our University in many ways."

At Harvard University, in June, 1987, President Derek Bok devoted his commencement address to the international dimensions of the University, remarking that "with the demise of the British Empire, the sun never sets on the Harvard Alumni Association." To stretch the imagination, he created a fictional history of Harvard which described the University shortly after the year 2000:

> Another boost to recruitment came from the branch campuses that Harvard had established in over 20 nations. By 1990 Harvard finally decided to follow the lead of multinational corporations, law firms, accounting enterprises, and other modern organizations by establishing a presence in other countries. The University had long been urged to do this by foreign alumni and progressive educators abroad and even foreign governments that wanted to import American methods and shake up moribund local systems.
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> While expanding abroad, Harvard also made more efforts to give its domestic students a thoroughly international outlook. In this the presence of thousands of foreign students in Cambridge made a big difference. By the early 1990s, the faculty further agreed that no one should graduate from the College without at least six months of study or work abroad. In addition to their departmental concentration, each student henceforth had to choose a geographic concentration consisting of a foreign language, a core course or two on a foreign nation, and a period of study and work in that same country. In this way Harvard made language and foreign culture requirements more meaningful by linking them to actual experience abroad. With the help of overseas campuses, it was relatively simple to establish well-supervised programs of work and study in many countries.

In the meantime Harvard, which does not often create university-wide committees, established a University Committee on International and Area Studies in 1986. Its first product, a 1987 directory of people on campus who have a major international interest and expertise, excluding those whose interests are historical or in science, languages and literature but including

visiting research associates, is a compendium of more than 500 names. It will guide intra-campus, corporate and government contacts. The committee's agenda is evolving. Concerned about long-term enhancement of faculty capabilities at Harvard and elsewhere as crucial to the success of research universities, it has been focusing particularly upon the achievement of combined excellence in disciplinary and geographic area study: Harvard recently established an Academy for International and Area Studies within the Center for International Affairs to provide opportunities for promising people in the disciplines to deepen their area study and for area studies specialists to advance their knowledge of theoretical developments and modes of inquiry in the academic disciplines. Another concern is the development of processes to assure that the large number of foreign students admitted to Harvard be of the very highest quality.

At Boston College, the president established a Committee on International Education which organized itself into three subcommittees: Enrollment, Curricula and Grants. In its first report to the president in September, 1986, the committee mainly submitted curricular recommendations: strengthen the recently established international studies minor, establish an interdisciplinary graduate-level program in international studies, include international courses in the core curriculum, encourage faculty development, broaden study abroad options for undergraduate students and respond to the demand of graduate students for foreign study opportunities, and establish a center which would "serve as the focal point for the integration and correlation of all existing and future programs."

A major recommendation is to expand foreign language offerings. It includes the statement that "For competitive reasons courses in Japanese should be introduced and an advanced course in Chinese should be added to the curriculum. The changing business world with its increased emphasis on international trade requires both a practical perspective and an innovative approach toward better communication among countries and nations." Another recommendation calls for establishing a consortium with other colleges and universities in the Boston area; three exploratory meetings were held involving 11 institutions, one of them hosted by Tufts. As part of its increased attention to international studies, Boston College has been sponsoring and publicizing special campus events, including a reception for all its former Fulbright Scholars, a reception for the foreign consular corps in Boston, and a series of seminars and presentations. April, 1987, was International Education Month at Boston College.

Bentley College, with 200 full-time faculty members, 85% of its student enrollment in business education, and students also majoring in the liberal arts, has committed itself to comprehensive internationalization following a 1986 report from its Internationalizing Bentley Committee. The report's introductory statement of rationale leads with "In America today a general lack of understanding of the international roots of our global society and its economy exists" and quickly makes the connection to "our nation's lack of competitiveness and its poor productivity performance." Elements of the underlying philosophy are that the provision of international perspective is not to be "an add-on program" but an integral part of the curriculum and of extracurricular activities and that "internationalizing a college means internationalizing each individual." There is also an explicit recognition

that "competitive parity" with other institutions requires a strongly international orientation.

The Bentley plan lays forth strategies for: internationalizing the faculty by drawing from an International Research Fund, encouraging sabbaticals abroad, and inviting visiting scholars in business disciplines; internationalizing the student body by recruiting on three continents, encouraging foreign students by extending English as a Second Language (ESL) instruction, and internationalizing the freshman orientation program; and advancing exchange at all levels by working toward linkage with at least ten foreign institutions. All departments are to be involved in the internationalization of the curriculum. Bentley will seek an international reputation for excellence in business education. The report states that "Competency in a foreign language should be required of all graduate students concentrating in international business within the MBA Program and all undergraduate students concentrating in international management within the management major." The college will develop an international studies major in the liberal arts which "considers the global interactions of nations, societies and business." Bentley has established a college-wide International Council, and in 1987 will have an International Center headed by a director responsible for program development and coordination.

International integrative structures such as those being created at the University of Connecticut, Central Connecticut State University and Bentley College are becoming common features of the New England academic landscape in the 1980s. It is typical that the structures are in the form of centers or program offices headed by a dean or a director. Some have their roots in

study abroad programs and others in providing a campus center to serve foreign students. A third type concentrates on multidisciplinary research. Prototypes of these three categories are the University of Massachusetts' Office of International Programs, established in 1969, Wellesley College's International Center (1972-), and Harvard's Center for International Affairs, created in 1968.

While the current trend is toward centers and directors having the functions of planning broadly, developing academic programs, negotiating arrangements overseas, overseeing the foreign student and study abroad offices, and advancing government-sponsored research, there is great variety among the new structures:

* Boston University in 1985 created the position of Vice President for International Projects; this position is in addition to the Center for International Relations and its Directorship, which were established in 1981-82.

* Brandeis University, which has had a Directorship of International Programs since 1981, has "on the drawing board" a Research Institute in International Studies.

* The University of Bridgeport has established a Council of International Fellows to advise the Board of Trustees on international matters, its purpose being to ensure that the university maintains a leadership position in international education.

* Brown University in 1987 established an Institute for International Studies on such a scale as to become nationally prominent.

* Dartmouth College's Dickey Endowment for International Understanding, 1982-, funds catalytically, supporting initiative and benignly intruding itself broadly across the college's units to advance faculty development and research, the expansion of international curricular content, and the enrichment of foreign study programs.

* The University of New Hamsphire in 1982 established a Center for International Perspectives "to encourage, advance and facilitate multi-disciplinary teaching and learning of international affairs."

* Saint Michael's College created a Center for International Programs, headed by a dean, in 1984, as part of a broader thrust toward expansion and innovation.

For those who are ready to move programmatically beyond the confines of the global economy into space, the Massachusetts Institute of Technology is beginning to organize an International Space University. The planning stage will involve leaders from a variety of disciplines, several countries and aerospace corporations as well as graduate students from M.I.T.

The internationalization
of business education

International business education has come to have a meaning far broader than preparing people to export, import or invest abroad. The mission now is to educate people to operate successfully in a global environment at a time that virtually every industry is subject to global competitive forces. The role of business schools in providing international education is also important because of the large proportion of business students on our campuses. Business graduates comprise 23% of all bachelor's degrees nationally and 22% of all master's degrees.

A dozen years ago, remarkably few business schools offered much international perspective. Curricula were established when the United States was more insular than it is today and when international commerce was peripheral and it was not so important to understand worldwide business conditions, effects and opportunities. Many business schools across the country are adjusting very slowly. A 1976 study by the American Council on Education found that 75% of the students completing business doctorates in the United States, i.e. those who would in large part constitute our future faculties, had never taken a course in the international aspects of their business studies. A 1984 follow-on study commissioned by the National Council on Foreign Language and International Studies found that 83% of the doctoral students at that time had not done so.

In the mid-1970's, the American Assembly of Collegiate Schools of Business (AACSB), which sets accreditation standards, began to address the problem of inadequate learning about the international aspects of business. Through several phases, it developed an accreditation standard which made it very

clear that every business student should be exposed to the international dimension through one or more elements of the curriculum. Clearly, not all institutions will meet this standard in the same way, given differences in business school missions and capabilities. Schools may meet the standard in any of several ways which will have the effect of exposing each student to "international content." There are basically three strategic choices. One is to put everyone through an introductory course in international business. A second possibility, perhaps suitable to some few institutions having a very specialized faculty, is to require each student to take an international course within his or her major, e.g. in marketing, finance, accounting or management, some of which courses might be broadened to include consideration of political context, labor movements or cross-cultural communication. A third possibility, which surely is best for institutions with a small faculty or which produces generalists and people whose careers will be in small businesses, is to pursue an infusion strategy, so that there are international components across the curriculum. Although business/management schools may be successful, very international, and even prestigious without being accredited, meeting the AACSB standard is an object of concern in several New England institutions. Standards convey general expectations, and accreditation conveys the understanding that an institution is recognized as meeting professional standards.

New England institutions generally pursue the infusion approach, for at least two reasons: the international dimension has become part of all things, and it is difficult to find experts to teach specialized courses. All New England business schools combined produce only four to six doctorates per year in international business. These low figures mask the facts that MBA's teach many courses, including international ones, and that doctoral candidates in

the various functional fields sometimes have strong international backgrounds. Nonetheless, several business school deans mentioned difficulties in attracting appropriate faculty. Moreover, as research generally precedes curricular development and as research tends to be undertaken by people with doctorates, the under-production of doctorates slows internationalization.

Deans and leading faculty members at many institutions are encouraging the development of international business knowledge and teaching. For example, from Boston University, Yale and the University of New Hampshire there was a consistent message: "globalization is so pervasive that all students should gain an understanding;" "there is no other way to go;" "I would be distressed if students escaped without an exposure; students need to know what distinguishes the global from the American." Repeatedly, faculty members stated that globalization is affecting all business fields, even a course in "Government Regulation of Business": whereas antitrust laws are based on the assumption that the American market is the basis for judging whether there is competition or monopoly, a new school of thought holds that because markets are now international, the old basis for government regulation is no longer germane.

The very pervasiveness of internationalization suggests the appropriateness of internationalizing all the functional fields of business, integrating and comparing international and American material. M.I.T. basically takes this approach. Harvard, which played a pioneering role in international business education, in part through the Multinational Enterprise Project begun in 1965 and partially by its development of case studies,

anticipated that the international dimension would be integrated throughout the curriculum. Thus, it disbanded its International Business program in the 1970's, but perhaps prematurely, as the functional area faculty did not especially push people internationally. Harvard has a doctoral program in international business while the international component continues to gain strength within its functional areas.

Student interest has been increasing sharply. At Northeastern, 200 students are in the International Business "Concentration" (major), which has become the third largest, following finance and marketing; its growth is the most rapid. The University of Rhode Island has had to offer multiple sections of some of its international business courses. At the University of Connecticut, demand has been stronger than the ability to provide courses. At Yale, there is a 75-student International Management Interest Group. The Fletcher School of Law and Diplomacy started an International Business program in 1981; whereas traditionally most graduates have entered government and especially foreign service work, in recent years, most have gone to work for corporations, especially banks.

Student interest has been stimulated by foreign students, according to deans at a variety of institutions. Foreign students are numerous in business and management programs throughout New England. At Babson College, e.g., 10% of the undergraduates and 25% of the graduate students are foreign, and at Dartmouth, 10-12% of MBA candidates. At UMass/Amherst, 30% of the MBA enrollment is foreign. In the United States as a whole, 42% of entering business school doctoral candidates were non-North American in 1986. There is typically a strong concentration of foreign students within the international business courses and programs at all levels, many of whom will be hired by American multinational corporations; in some institutions there may be nearly

as many of them as there are Americans.

Few business students take a foreign language. Simmons College has the only undergraduate International Management program in New England which requires advanced foreign language achievement; it is an attraction to language students. Most business curricula have so many required courses within the business school, generally 60% of a student's entire plan of study, that it is difficult to include the courses required for substantial proficiency. The University of Rhode Island created an option in 1984 which enables a student to major in management and minor in international business and in languages; few students are involved. Because the University of New Hampshire's Whittemore School of Business and Economics only requires that about 40% of a student's courses be within the school, it is possible for business majors to enroll also in the Center for International Perspectives program, leading to a combined degree in Business and International Affairs. Again, very few do so.

For international business faculty, there are significant problems, frequently cited. One is that they are torn between two fields, the international one to which they devote most of their attention under conditions of increased demand, and the functional field in which they tend to be evaluated for tenure. Secondly, the case study literature from which to teach in the international field is weak, yet personal advancement is based on producing peer-reviewed journal articles rather than case studies. The weakness of the case study base causes faculty members to focus their teaching more toward loftier levels of business policy or international economics than many faculty members find desirable.

Faculty development and faculty shortages are significant problems.

Curricular infusion approaches require faculty re-training, which is difficult to arrange. To be able to offer international courses, many institutions have hired foreigners, have sought people from corporations to teach the courses, or have added faculty members whose doctorates are in economics, political science, history or psychology. There are various interpretations of the significance of these patterns. Some suggest they are a sign of weakness in the field of business education, but that such a judgment depends on the proportions and that perhaps the phenomenon is, in part, a transition phase. The appointment of social scientists has three bases: the business literature is becoming increasingly like that of the social sciences, e.g. in organization theory; cross-cultural communication is basically a social science field; and the context of international business is very broad, including public policy. Illustrative is the Harvard Business School's required first-year course in "Business and Government in the International Arena;" Yale's School of Management offers a basic course in "Business, Government and the International Economy." The Harvard Business School faculty includes three political scientists whose backgrounds are in political economy. When Harvard hires social scientists for the business faculty, it puts them through its business executive program.

While there are issues concerning how to approach internationalization and a considerable number of problems, it is clear that internationalization is underway. Numerous New England institutions, public and private, offer courses in international marketing, finance and management. Many do so at both the undergraduate and graduate levels. In New England, however, a large number of private colleges and universities do not offer undergraduate studies in business. In general, international business courses are becoming popular

and institutions are seeking faculty with international backgrounds and encouraging faculty members to acquire international experience. At Clark University, one-third of the faculty members have international interests. At Dartmouth, 16 of the 18 senior faculty members have had professional experience abroad in the last decade. At every one of the six state universities, there are faculty members who serve as consultants on the international aspects of business.

Increasingly, there are programmatic innovations (For a discussion of new programs in international internships, see the section on "Foreign students and study abroad.)" The University of Southern Maine is creating a course in foreign trade which it will require for the MBA, and it would like to link its international focus to economic development in Maine. The University of Vermont has established a professorship in Canadian-New England Business and Economics, and the University of Maine is creating a parallel position. The University of Rhode Island expects shortly to establish an Institute of International Business.

Boston University became the first American university to have a graduate management program in Europe when it established Boston University Brussels in 1972. A second innovative step followed in 1980 when the Vrije Universiteit Brussel joined Boston University in offering The Master of Science in Management (MSM) degree. This was the first such joint program by an American and a European institution. Since 1984 Boston University also has been offering an MSM program jointly with Ben-Gurion University of the Negev in Beer Sheva. The University of Massachusetts is now planning a joint MBA program with the University of Buenos Aires.

At Boston University, another new development is being planned. Its Metropolitan College, which offers a broad curriculum to those who cannot attend classes at the usual hours or need to be reached at a teaching site away from the downtown campus, is considering the development of a graduate program in administration with a concentration in international commerce. For this program it would expect to offer courses ranging from international finance to organizational behavior in multicultural environments.

In the provision of international business education, four institutions provide a range of models:

* Bunker Hill Community College, in 1987, is requesting approval from the Massachusetts Board of Regents of Higher Education to offer an A.A. degree program in international business. For several years it has been developing a practically-oriented program in export education to serve the business community and especially the needs of small business. Bunker Hill proceeded from the premise that local small and middle-size firms are entrepreneurial, but need "export familiarity." To create its program, it sought outside funding on the basis of several project components: a needs assessment, a program plan prepared with the assistance of "resource people" from British polytechnic universities, and a strong advisory board representing perspectives ranging from freight forwarding to the Shawmut Bank and The Bank of Boston. In 1985-86 it won a grant under Title VI-B, the International Business Programs section of the Higher Education Act; the award was renewed for 1986-87. Bunker Hill utilizes mainly adjunct faculty in offering its program during evenings at a convenient downtown Boston location, namely in the Bank of Boston building. Based on this evolving curricular experience, Bunker Hill seeks to take the next step: offering a degree program.

* Babson College, in 1986, began blending its liberal arts and business courses in a cluster course mode. Babson's internal organization may be viewed as conducive to such creativity, as the liberal arts faculty constitutes a division within a college of business administration. Moreover, its president has also articulated its role and philosophy in conducive terms: "Babson prepares students for managerial responsibility. Our graduates hold leadership positions in business around the world....Tomorrow's leaders need both the focus that good business courses can provide and breadth from the humanities, sciences, and arts." The cluster approach involves faculty members teaching two or three separate, autonomous courses in coordinated fashion with common themes, common tests, and occasional joint class sessions. Faculty seminars precede the organizing of the courses, continue during the semester, and are an aspect of faculty development. Each substantive focus is accompanied by a skills course component, e.g. speech. Examples are: "Ethics, Business Management and Speech," "The Success Myth in America," and "Law in Nature, Society, and Language," which included treatment of Apartheid and the application in South Africa of the Sullivan principles, to which more than 100 American corporations subscribe. In all, 22 courses have been taught by 20 faculty members in eight clusters. The clear advantage of the approach is that it transcends the notion that professional and liberal arts courses are fundamentally different in kind, and extends faculty and student knowledge across traditional structural barriers. In complement, Babson is considering the creation of a minor in liberal arts, which could be interdisciplinary, e.g. in Asian Studies. Conceivably, a student would be able to minor in Chinese by taking the requisite language courses at Wellesley.

* Bryant College, which is structurally similar to Babson, is undertaking program development along several lines. It is planning an International Studies Program which will combine functional business elements with internationally-focused courses in the liberal arts. This development will be occurring while there is a gradual, discernible shift in student interest toward broadening their studies beyond narrow specialization and increased attention to the field of management within the traditional business curriculum. Additionally Bryant is working toward the infusion of international perspective throughout the whole curriculum and is adding two new courses, an introductory course on "World Business and Its Environment" and a capstone course on "Multinational Strategies." Bryant anticipates having a coordinator to promote international program development and coherence.

* Boston University has lodged coordinative responsibility for its international business curriculum in its Management Policy Department. The reasons are several: the Department's concerns are at the intersection of business and government policies; the international dimension is multi-functional as well as multi-cultural; in the age of the multinational corporation, the international dimension is fundamentally managerial. For a long time Boston University had been offering, as had many other institutions, courses in international trade, marketing and economics. The need to give the international business curriculum direction coincided with the need to convey international connections in the field of Management. In 1983-84, Boston University reviewed its own and other institutions' programs in Management and added people with international backgrounds to the Management faculty. In addition to having graduate and undergraduate programs in international

business, Boston University has a new curricular "Concentration" in its undergraduate Management program; it attracted 17 students in 1985-86 and twice as many in 1986-87. It is contemplating a parallel program at the graduate level.

* The University of Connecticut, since 1985-86, has been offering a course on "International Business in Connecticut: German Firms." The course is an introduction to international business in which the presidents or vice presidents of German companies in Connecticut serve as speakers each week. These companies are members of AGABUR, the Association for German-American Business and University Relations, which was created to support the course and the follow-on program in Germany. The course serves liberal arts students and, for business students, is accepted as an elective in marketing. Some of the students subsequently participate in the six-month study abroad program at the University of Mannheim, which includes intensive language learning. AGABUR firms tend to be very much interested in students who have good German language skills. At the end of the Mannheim program, some students serve internships or traineeships at export-oriented firms in Germany. In placing these American students, who are fluent in German, the university is assisted by AGABUR firms and by the Connecticut Trade Office in Frankfort.

* Quinnipiac College's International Business Center has a unique program, marked by early clairvoyance, which focuses on the marketing of Connecticut products in Japan. In 1973, intending to contribute to the training of business personnel, the center began to offer courses on exporting, on Japan, and on exporting to Japan. Its B.S. program in International Business followed, as did internships in various countries,

including Japan. The curriculum now focuses the students' attention on five courses, including export marketing and finance and a major research project course, which together prepare the students to function in exporting. Quinnipiac places the students in Connecticut companies to experience intensive internships of at least three months' duration, for which the companies pay a $3,300 fee. Since 1983, Quinnipiac has organized collective internships, taking six or seven students to Japan as a group. Each student goes as a representative of a Connecticut company, assisting company personnel in marketing products in Japan; in effect, the group constitutes a trade mission. By the time these students have graduated, they have had business negotiating experience in Japan. As the Quinnipiac program is being expanded, the alumni network helps with placement. The program has been operated in large part with external grants, including support from the U.S. Department of Commerce, the U.S. Department of Education, and Connecticut's Department of Economic Development. Quinnipiac College, through this program, has stimulated exporting to Japan which otherwise would not have occurred.

Executive development has become a major business school function. International executive development, like any other kind, requires capability and credibility. Corporations have called upon individuals to consult on particular subjects, sometimes at seminars or retreats, for a long time. Many institutions, including all six state universities, have faculty members who consult on this basis on international topics. In general, such outreach follows research and curricular development. Doing it on a broad basis institutionally requires faculty-building. Business schools are encouraging consulting as a way of enhancing faculty experience and institutional contacts. International executive development is still a nascent, underdeveloped field among New England academic institutions.

Two kinds of executive development programs are being developed for Americans and, as rare as they are, may be exemplified as follows. The University of Massachusetts, in cooperation with The London Business School, in 1984 began a Massachusetts International Fellows Program, an intense two-week program for mid-career professionals. Participants have evaluated it glowingly, but their number has been very small. Dartmouth is exploring the possibility of developing executive programs in Europe.

Boston University has secured initial corporate contributions toward developing an internationally-focused curriculum appropriate for executive development. It will be targeted toward Massachusetts high technology industries. The university, which probably has attained the critical mass of internationally-oriented business faculty needed for this program development, anticipates associating a dozen faculty members and assistants with this initiative.

Not surprisingly, there also are opportunities for New England institutions to offer programs for foreigners, Asians especially. Central Connecticut State University has a Japanese-Korean Summer Business Institute, Boston University has an Asian Management Institute serving Koreans, and Babson has been approached by Japanese corporations about the possibility of providing international executive training for Japanese businessmen.

The liberal arts and economics

There has been a national conversation, across the last several years, concerning the quality of undergraduate education. Catalytic were numerous reports and conferences. The majority of America's colleges and universities have been looking afresh at their curricula. According to the American Council on Education, 40 percent of the nation's colleges have been considering ways to increase the international aspects of their curricula. In general, however, they have not been defining the objectives or exit skills associated with international education.

Our New England evidence suggests that it is everywhere assumed that international education is an essential component of general education. Bowdoin College states that "a true liberal arts education must be international in scope." The University of Bridgeport has designed its core curriculum with an international perspective and requires all senior-year students to take a capstone seminar focusing on world issues. Saint Michael's College states that every student should have an education with an international dimension and wants to infuse the whole curriculum with international perspective. The Strategic Plan for Keene State College begins with a series of assumptions about future students, including: "Our future students will be unlike those we have taught in the past....Students will express increased interest in globalism. They will desire increased opportunities to perceive the world from a global perspective, and will exhibit interest in programs and activities which expand their cultural understanding and foreign language mastery." Keene State also postulates, among the characteristics of the ideal graduate: "Our ideal graduate will

have an understanding of the main currents of Western culture and American society, of world geography, and of other cultures. This graduate will be able to perceive the world from a global perspective...."

Student interest has indeed been increasing. At Boston University, the number of undergraduate International Relations majors doubled in the last two years to 450. International Relations has become one of the leading majors at Simmons College and one of the top three at Brown University. At Tufts, ten percent of all College of Arts and Sciences students are majoring in International Relations, while other large groups of students are majoring in Economics, History and Political Science, disciplines which convey much international substance and provide core elements of the major in International Relations. Boston College's International Studies Minor, initiated in 1984, had an enrollment of 70 in 1986. At Bates College, there has been nearly a doubling of internationally-focused economics courses in this decade.

Some international relations programs are remarkably rigorous yet nonetheless very popular. For example, the University of Maine offers double majors in International Affairs and any one of five disciplinary areas: Anthropology, Economics, History, Language, and Political Science. Students must take courses in each of these departments and must complete three collegiate years of a foreign language. There are approximately 100 majors in each year of the program.

Across the curriculum, international content is increasing quickly. As evidence one may cite the 1986 UMass/Amherst faculty survey, which included questions about the future of international content. The faculty predicted that across the next three years, the level of international course content will increase 10% for undergraduate courses. This finding covers not only

liberal arts and social science courses. A manifestation of the general internationalization of the disciplines, it indicates that students' exposure to international content will increase whether or not they take courses that are nominally international.

It is only in the last few years that institutions have addressed the need for global perspective as a matter of general policy. Many have answered the need by requiring that all students during their first two years take any one of several designated courses on non-western cultures or regions, or on international affairs more broadly. Such a requirement within general education has become a common curricular sign of the times. One finds the non-western requirement, e.g., at Bowdoin College and Dartmouth College. The arts and sciences college at the University of New Hampshire requires taking a course on a foreign culture, and the one at the University of Maine requires taking a course with an international focus. In general, the issue of whether to provide a global perspective has been answered affirmatively, leaving the follow-on issue of how to do it. The easy way is to let students choose from among existing courses; the more demanding is to design new courses, such as a course on the global economy, to meet the purpose.

A larger issue is how to internationalize the curriculum more broadly. The possible approaches include: comparative analysis within the disciplines; interdisciplinary approaches such as international development studies or as provided commonly for international relations majors; infusion throughout the curriculum; issue oriented focuses; and area studies, civilizational and intercultural approaches. Also at issue is the approach to foreign language study, which has been restored as a requirement in some places.

Different kinds of institutions will address the issue of approach variously. For example, while most history and political science departments have courses on world regions, very few institutions have the critical mass of resources needed to offer a strong area studies program on any particular world region. Thus for most institutions area study programs are not among the options, and other ways of thinking about international education are more suitable. The Experiment in International Living's School for International Training offers a B.A. in International Studies for which the globally-focused curriculum is based on world issues. As will be discussed, Clark University is developing a functionalist interdisciplinary approach.

Following are some ways in which New England institutions are shaping programs to encompass the global economic component within the liberal arts:

* The University of Southern Maine is developing an International Studies major with three optional concentrations, one of which is in international management. This concentration is intended to include courses focusing on trade, international business, and eventually a course in political and commercial risk analysis.

* Middlebury College in 1983-84 created a major in International Politics and Economics. Students take five of the most difficult courses in each field, including the capstone senior seminar in each. One of the courses includes coverage of the globalization of industry and the internationalization of money markets. Students must gain sufficient foreign language competency to qualify for the junior year abroad program, with the exception that those studying Japanese or Chinese may go later and do not attend Middlebury overseas programs but instead are sent to universities in Japan and China. In the Middlebury program, students take courses abroad in politics, economics and literature in the foreign language and thereafter use

the language in their senior year research on campus. This major is so demanding that few students were anticipated. The number has doubled each year, reaching 67 in 1986-87.

* The University of New Hampshire, through its Center for International Perspectives, has created a double major crossing the University's component colleges, so that one may earn a degree in Business and International Affairs or, for example, in any arts and sciences discipline "and International Affairs." The program has three stages. First-year students take an interdisciplinary two-semester sequence of courses consisting of three segments: global-political, global-economic, and global-scientific, each of which may vary in the themes. Second and third year students must complete six semesters' equivalency of a foreign language and take time for study abroad. Fourth-year students take a capstone senior seminar. It is difficult for a student to undertake this double major if his or her other major is within the Whittemore School of Business and Economics, as it does not have a foreign language requirement, yet nonetheless half a dozen students are doing so. The center has a budget line which in part makes it possible to support course development. An overall effect of the program is that students in any field can complete work in their own disciplines within an international context.

* Boston University has developed a new M.A. program in International Relations in each of the last three years, beginning with a one-year M.A. in International Relations and following with programs requiring two or more years of study: one is in International Relations and Communications and the newest combines the M.A. and M.B.A. into one program awarding both degrees.

Innovations which encompass the global economic component are still unusual, yet signal clearly that academic institutions are seeking ways to adapt constructively to this global transformation within a liberal arts framework. The University of Vermont is contemplating the creation of a course on "World Systems Analysis" which would have an economic component. The University of Bridgeport's Long-Range Plan proposes an inter-college foreign trade major. At Yale, political economy is a new thrust of the Center for International and Area Studies. Williams College, which requires all Economics majors to take a senior seminar, has for the last two years focused the seminar on "Can America Compete?"

At New England institutions there is both unusual strength and innovative programmatic development in the field of international economics. There is extraordinary attention to Third World development.

Boston University has the country's largest program in developmental economics and Williams College the second largest. Both are graduate level programs focusing on Asia, Africa and Latin America and serve mainly mid-career officials from those parts of the world. The Boston University program has approximately 150 students; Williams' "Center for Developmental Economics" has 20. At Boston University, 60 percent take the M.A. and a third the Ph.D.; the Williams program leads to the M.A. The effects of these powerful programs are several: the numerous internationally-oriented members of the Economics faculties make their departments strongly international; there is spill-over into undergraduate instruction within the departments; close ties with economists in other countries have been developed; foreign students become attracted to these institutions; there are foreign contacts and American faculty consultants available to corporations; there is a

sufficient professional mass to sustain significant research on the economies of other countries; and at Boston University there is an exceptionally strong economics base within the University's several area studies programs.

Also focusing on Third World development, the Experiment in International Living's School for International Training offers an M.A. in International Administration for development professionals from the United States and developed countries. More than 750 students have completed the program since 1975.

Outside the framework of liberal arts faculties, New England has still another unique institution designed to meet the needs of developing countries. Arthur D. Little, Inc., since 1964, has conducted a Management Education Institute. Across the years more than 1,600 students have completed its M.S. in Management or certificate programs. Although it is a corporation, Arthur D. Little is also part of the academic community. Mainly an international research, engineering and management consulting organization, it has undertaken projects in many countries and utilizes case studies in its Management Education Institute.

Three academic institutions provide varied approaches to programmatic development in international economics:

* Brandeis University, following consultation with corporations, is creating the Lemberg Program in International Economics and Finance. A two-year M.A. program, its objective is to impart the technical skills of finance within a global interdependence framework. Brandeis is permitting senior undergraduates to participate in the program as a five-year undergraduate-to-M.A. plan of study. Students will be required to take a foreign language and will go abroad as part of the curricular experience. The first group, in 1987, is going to Japan, England, France and Spain.

* Clark University has a long history of innovative program development in international relations. Soon after World War I it offered the country's first Ph.D. in International Relations, and in the same era it developed a nationally prominent Graduate School of Geography whose focus included demography and economics. Clark has been developing a functionalist interdisciplinary approach rather than an area studies approach to internationalization. Its Center for Technology, Environment and Development (CENTED), which with varying degrees of time commitment involves 35 faculty members, has two divisions. One focuses on international development, e.g. on resources, food production, labor markets, migration and regional economic planning. The other division focuses on environmental issues. Two curricular sequences have emerged: B.A. and M.A. programs in International Development, which includes 20-25 M.A. candidates, and B.A. and M.A. programs in Environment, Technology and Society.

* At Middlebury College there is being established an International Institute for Economic Advancement which, it is intended, will be an umbrella institute over several campus-based centers around the country. In this framework there is being created a Middlebury Center for Economic Studies. The program will begin with conferences bringing together business and government economists with academic economists. Part of the overall purpose is to build relationships between academia and business in international economics.

Within the liberal arts, internationalization is gaining momentum and taking many forms. Global perspective is an objective which is increasingly common and is being achieved in a variety of ways. There are signs of fresh vitality in Economics and, as we shall see, in foreign language study

and some area studies. There are innovative attempts to enhance the global economic component within the liberal arts, but they are still nascent and few.

Internationalization in the academic disciplines

While very visible changes are occurring at New England colleges and universities, something subtle is also happening: internationalization within the academic disciplines. This development is of great importance because the disciplines are often the gatekeepers of academic change as well as the building blocks of the curriculum; administrators' dreams of change do not become realities until the disciplines are ready to implement them. It is also important because, as the disciplines become more international, international learning occurs as part of general learning, even in many courses whose titles do not convey international content. Fundamental change within the disciplines indicates a long-term trend rather than a fad. Textbooks now signal this kind of change, for example in the functional fields of business. So do faculty appointments. Three fields are indicative:

* The field of Communications/Journalism, wherein change can affect the continuing education of adults through the media, increasingly reflects the era of global information and connectedness: it is necessary to prepare media people to convey world news when every community is affected by international trends and events and when world news often has a local connection or local news can only be explained in an international context.

Increasingly, courses treat differences between the work of U.S.-based and foreign-based reporters, transborder information flows, and comparisons of American and foreign broadcast and print media systems as they are influenced by economic and political circumstances, history, social structure and local culture. The University of Massachusetts offers this kind

of approach. It will enable future journalists to be sensitive to the contexts of the foreign news they will receive, edit and present to American readers, listeners and viewers. The perceptions gained also provide insight into foreign receptivity to different kinds of advertising, which is another facet of communication.

* The field of Political Science is significantly American in its origins, and its main focus has been on American government and politics. In the 1960's the behavioral revolution pushed this discipline from the study of formal structure and process toward a search for data to test hypotheses. The data utilized and the excitement in this discipline were overwhelmingly American.

Nonetheless, changing circumstances beyond the United States began to have an enormous effect upon political science. Attention to the developing countries beyond Europe revealed that the focus on formal structures which had been characteristic of the study of European government would have little explanatory potential. There was a turning to sociological and economic analyses of the bases of politics, and a sub-field of "comparative politics" replaced "foreign governments." Comparative began to include American. Foreigners tested behavioral theory with their own data so that the validity of hypotheses tested in the United States became viewed in wider context. Meanwhile many political scientists became experts in various fields of public policy and, particularly as some public policies are transnational in their effects, there is growing concern with the comparative understanding of public policy. There is a rapidly growing sub-field, for example, of comparative political economy. The impact of external factors upon decision-making within countries has become manifest even in very large countries. All these

phenomena are having the effect of blurring lines of separation between domestic and comparative or international divisions within political science.

Often it is in courses in international relations or international politics that students acquire basic knowledge about this country's interests in other countries and their interests in the United States, as well as the purposes and instruments and patterns of foreign policy, international problems and their resolution, alliances, international organizations and diplomacy, and concepts of nationalism, sovereignty, balance of power and interdependence. On many New England campuses there are also topical courses, for example on national security, deterrence and arms control. In the teaching of such courses there is increasingly a global rather than a between-nations perspective, as the economy, super-power rivalry and communications systems have become global. While the nation-state remains the basic unit of action and analysis, the behavior of states is now commonly presented to students in the context of power, resources, motivation and constraints in the global system. Also there is growing emphasis, beyond descriptions of interests and strategies, upon explaining behavior and outcomes in the context of inter-active world politics. These shifts signal the coming of global perspective.

* The field of History serves as a cornerstone of the general curriculum and liberal education. If there is any one field in which a debate about relevance will be of general interest across a campus, that field will be History.

Tufts University, during the 1986-87 academic year, adopted a liberal arts foundations course in world civilization. It is to be historical, interdisciplinary, cross-cultural, and for all students. It is to be presented

with options so that students may take either of two two-semester sequences.

The Tufts decision is at the cutting edge of more general debate about the appropriateness of the traditional freshman course in western civilization, which has a national enrollment of approximately 600,000 and has provided both a common intellectual experience for great numbers of students and an instructional arena for improving student skills in writing and discussion. This traditional course has been defended as being fundamental to our understanding of our intellectual roots and continuing national interest in Europe as well as of the democratic and other cultural values which undergird our institutions and behavior.

Yet there will be only one basic non-American history course in any curriculum, and the issue is relevance. There is questioning as to whether a course focusing on western civilization, which reflected what was overwhelmingly important in the world when such courses were created between the World Wars, is adequate in a post-colonial world in which more of our national trade is with Asia than with Europe and a large proportion of the political and strategic problems we face in the world are not European. The issue, some say, is not only what students need to know to make sense of their world, but is also becoming a matter of ethnic roots: Western civilization courses reflected and integrated the cultural heritages of most migrants to this country years ago, but today, as the number of blacks, Hispanics and Asians in the United States increases, some parts of the country are on the verge of having majority populations of quite different roots. Given the globalization of both politics and the economy, say the advocates of change, it is time to develop the third phase of History's contribution to civic education: from American history to Western civilization to global history.

Increasingly at issue is how to reconcile the focus on Western civilization with a world view. Central to possibilities for reconciliation is the development of a new field of World History which is moving beyond the presentation of parallel continental histories and seeking organization around new conceptual constructs. Changes in scope are bringing changes in proportional treatment assigned to component topics and in the level of generalization. They change the focus of inquiry and lead to changed methods of inquiry, to discovering new patterns and conveying a different understanding of history, with more comparison and probably more emphasis on long-term processes, groups of people and cross-cultural analysis. Within the discipline, such change would be a fundamental shift, as was the behavioral revolution in the social sciences. It can change expectations about what historians should know and teach and change the graduate education of historians. These things are starting to happen, while at the same time a wider circle of academics is becoming concerned about the objectives of the survey course in a global era.

In overview, the internationalization of the disciplines is parallel to a quiet development in the field of business, wherein we see creeping internationalization leading to the collapsing of international offices into more general functional offices. As doing American business increasingly means doing international business, Bank of Boston loan officers now handle global as well as domestic business. Thus in both business and academia, the international dimension is in transition from being something apart to becoming integral in professional work and perspective.

Foreign language and area studies

Foreign language and area studies are central to our knowledge about and ability to communicate with the rest of the world. In New England, within a framework of overall strength, we find three particularly dynamic current developments: reinvigorated foreign language study; dramatically increased focus upon and relationships with East Asia; and strongly reinforced interest in Canada.

The New York Times' James Reston has asserted that the United States does well in the "hardware of high tech," but is an underdeveloped country in the "software of language." Foreign language enrollments are increasing across the country after a continuing decline between 1968 and 1980 which occurred despite an extraordinary increase of 4.5 million in total college enrollments. The current upward trend is likely to cause enrollments to exceed the 1968 peak of over one million in 1988. Spanish, French, German, Italian, Russian and Latin, in that order, are the six leading languages and account for more than 90% of all enrollments.

Testimonial evidence from New England campuses strongly suggests that economic and technological developments are key factors in the revitalization of student interest in foreign language study. No doubt, the movement toward restoring or establishing more rigorous college entrance and general curriculum requirements and the evidence that foreign language study promotes increasingly important cross-cultural understanding and effective English usage are also among the causes of revitalization. Yet the economic explanation, linked to new opportunitites for using languages, seems more powerful.

Language departments traditionally have specialized in literature. Despite all the virtues of the humanities, they were losing enrollments at a time of very rapid expansion of international communication. Interest grew in learning language to communicate and for special purposes; for example, Northeastern teaches Business Spanish, French, and German, while the University of Rhode Island offers Business Portuguese additionally. Foreign language enrollment at business-oriented Bentley College has tripled in the last three years. At the same time, in perhaps no other field has there developed such ubiquitous use of the new technologies; video-cassettes, disks, narrowcast television, laboratories, interactive computer programs and satellitic communications are all being used to teach foreign languages, and generally in support of the thrust toward competence in communicating which is being stimulated by the global economy.

Particularly exciting because it will affect student motivation to learn is the coming new credentialing which can be communicated to employers. Oral proficiency testing is coming, radiating outward from the Educational Testing Service, the American Council on the Teaching of Foreign Languages and the Modern Language Association after numerous colleges and universities inquired about funding to move ahead. This will bring ferment and further renewal to the foreign language field, further signaling the importance of learning a foreign language as a skill to be used. On the horizon are generally recognized national standards adapted from those developed by the Foreign Service Institute which will provide clear yardsticks of learning progress, moving the measurement of achievement from a semesters-passed criterion to one based on proficiency, with tracking and collaboration across levels of education and the opportunity for people to learn toward credentialing

however and wherever they choose. The use of tapes will enable consistency in performance evaluation, and some linguists are now qualifying as certifiers. We may anticipate benchmarks of accountability for teachers and catalytic effects on curricular development and curricular evaluation, on the design of teaching materials, and on parallel testing in increasing numbers of languages. To some extent, changing the scorekeeping will change the game. Other changes may not be far behind. Much as language teaching developed toward teaching the 500 most used words, we are likely to see development toward teaching the themes which are central to cross-cultural understanding and effective communication. So, fundamental change in the foreign language field is another sign of a changing academic era, pushed from the outside at the very environmental base so that, as philosopher Thomas Kuhn said about paradigm shifts, "the pieces are sorting themselves out and coming together in a new way."

New England has been especially strong in foreign language study, nationally known for excellence in instruction, innovation and close linkage to language-qualified study abroad programs at numerous institutions.

Foreign language enrollments are increasing not only because of the reinstitutionalization of required foreign language study at colleges of arts and sciences, but also because of students' perceptions of future utility. At Brown University, which strongly recommends that applicants for admission have taken three years of foreign language in high school but requires no further foreign language study at the University, 38% of the students have enrolled in foreign language courses. At Yale, language enrollments increased in 1981 when the two-year college-level language requirement was reinstituted after an 18-year hiatus, yet remarkably, 65-70% of the language enrollments are not a

result of the requirement. Students are either going beyond the requirement or are taking second or third languages. The range of languages offered in New England is remarkable; Harvard offers instruction in nearly 70.

Middlebury College is a national center for foreign language study, with 45-50 states represented in its summer programs. Middlebury offers eight languages, and its proficiency movement is strong. At Middlebury, 20% of the whole College faculty is language faculty. In any year, approximately 80 students are on the roster as working toward its Doctorate in Modern Languages and 150 in the M.A. program. Each year it admits the number of summer students it anticipates will result in the arrival of 1,200, coinciding with the number of beds normally available, but 1,300 arrived in the summer of 1986. Most are members of other faculties or high school teachers. Enrollment in Arabic was capped at 50, while there were waiting lists for Chinese, Japanese and Russian. In parallel, Norwich University, another institution to which others send their students for Russian language training, reported that its Russian School enrollment had been about 110 through 1978 but recently has been 250. Norwich reports that students recently admitted have an unprecedently high level of aspiration and that the University is nonetheless having to turn away potential students. Nationwide, college enrollment in Russian grew almost 30% during 1980-83.

Innovative energy is moving in many directions. The high intensity immersion approach pioneered at Dartmouth is being applied at Norwich and in 1987 will even be conveyed to China. The School for International Training, which in the last 20 years has taught as many as 50 languages to approximately 20,000 students, has been developing corporate language programs. The University of Rhode Island, believing knowledge of foreign language and

culture is needed for mechanical and electrical engineers in the era of global contracting and technology transfer, is trying to start a five year program in international engineering. The widespread tendency toward teaching topical courses in language departments may be illustrated by a course taught at Simmons College in Spanish: "The Multinational Corporation from a South American Perspective."

There are also to be new structures. Brown University is planning a new Center for the Study of Foreign Languages. Williams College in 1986 announced the creation of a Center for Foreign Languages, Literatures and Cultures, which will have its own building. At the University of Bridgeport, a new International Institute for Language and Culture provides community outreach. Focusing on problems of language instruction with the support of major foundations, Yale University is organizing a consortion of eleven major private institutions across the country, five of them in New England: Brown, Dartmouth, Harvard, M.I.T. and Yale.

The Asia phenomenon

Most dramatic, across the country and in New England, has been the increase in the study of Chinese and Japanese. We have national data as well as New England particulars. The Modern Language Association did a survey of language enrollments across the country in 1983 and repeated it in 1986. Partial 1986 returns indicate that of 54 institutions reporting that they offer Chinese, 15 began doing so after 1983 while the aggregate enrollment of the other 39 increased by 52.2%. Of 56 institutions reporting that they offer Japanese, 17 had added it since the previous survey, and the collective enrollment of the others increased by 60.5%. In enrollments, Japanese is the

fastest growing language in American colleges. There are nearly five times as many students of Japanese as there were five years ago.

Student commitment to Chinese and Japanese is extraordinary. The latter is especially difficult structurally. Both require far more than do Western languages to achieve the same level of proficiency. Some sections are taught double-time for double credit, in effect precluding students from taking some other desired course. Both languages require study in Asia or in summer institutes to do well, and the price is high whether one goes to China or to Middlebury. Yet Dartmouth and Yale, for example, report a very low rate of attrition. Dartmouth has indicated that the increase in demand for Chinese has created a special problem: 55 students are taking first year Chinese, but Dartmouth offers the second year in Beijing and only for 25, so it is considering arranging a second such program in Taiwan; the present arrangement provides for a professor from Beijing teaching the third year course at Dartmouth. From Wesleyan University, most students of Chinese go to Taiwan or to mainland cities after the second year. In Chinese, from 1983 to 1986, Yale's enrollment increased from 117 to 140, Harvard's from 168 to 192, and Wellesley College's from 102 to 134. In the last two years Chinese has been added to the offerings of Boston University, Brandeis University, Norwich University, Williams College, and the University of Vermont. UMass/Amherst plans to begin M.A. programs in both Chinese and Japanese.

In cooperative arrangement, Bowdoin is offering Chinese, and Bates, Japanese. The Five College East Asian Language Program enables students at its member institutions, Amherst College, Hampshire College, Mt. Holyoke College, Smith College and the University of Massachusetts, to take four years of either language. In total state enrollments in Chinese, only California

and New York exceed Massachusetts.

While total New England enrollment in Japanese is not as great as in Chinese, the rate of increase is greater. At Brown it has been 30-40% per year in the last several years, and there are now four full-time teachers. Saint Michael's College and Williams College have recently added Japanese, and Boston College is doing so in 1987-88. Yale and Brown have joined the new consortium participating in the Kyoto Program in Japanese Studies, which is administered by Stanford University for students having a strong background in Japanese language and culture.

Asianization is a much more dynamic trend in New England than is indicated by language study alone. Several institutions have acquired faculty members in business or in economics who have Asian expertise. At Brown, enrollment in the History course on "Early Modern Japan" now exceeds that in "Early Modern England." At Dartmouth the enrollment in Chinese history exceeds 100, and enrollment in a course on Chinese religion, which had seven students in 1976, was capped at 100 in 1985. More subtly, interviews have suggested that courses cast in a global framework tend disproportionately to reflect concern with China and Japan, i.e., globalization is in good part a mask for Asianization. Also, faculty interest in Asia is growing beyond the specialists.

There is an unprecendented Asian presence on New England campuses. At M.I.T., if one includes permanent resident Asians as Asians, there are 4,000 Asians, constituting one-fifth of the student body. In addition, the faculty and staff in 1985-86 included 157 Japanese, 124 mainland Chinese, 51 Taiwan Chinese and 38 Koreans. Indeed, Asians earn the majority of graduate degrees in some fields of engineering at numerous American universities, and some

Asian firms are providing financial support to them; e.g., one Korean firm has given money to the School of Engineering at the University of Massachusetts, Amherst. Japanese are the second largest contingent of foreign students at Boston University and the largest at the Fletcher School of Law and Diplomacy. At the faculty level, several colleges are trying to attract a Fulbright scholar from Japan. M.I.T. receives very substantial sums from Japanese corporations, which have endowed nearly 20 professorships and supported projects in technological development. A Japanese corporate leader is a member of the M.I.T. Corporation, the University's equivalent of a board of trustees. Yale also has received Japanese corporate funding.

Mainland Chinese, who began to arrive at American universities only very recently, are the largest group of foreign students at the University of Connecticut and at Clark University, and the second largest at the University of Southern Maine. Also the second most numerous group of foreign students at Northeastern University, the mainland Chinese are the University's most numerous foreign contingent among graduate students. In 1986-87, 154 mainland Chinese were enrolled at UMass/Amherst. There are 125 Chinese at Yale, 70 of them enrolled in degree programs, the rest senior scholars. Tufts University is bringing to campus Chinese mid-career managers for a 15-month program of academic studies and industry internships and envisions expanding the program to include other New England institutions as hosts. Simmons College is recruiting students in China for a new M.A. in English and American Literature designed for Chinese students. Quinnipiac College is beginning faculty and student exchanges with Beijing Information Technology Institute. New England institutions which have begun study programs in China are numerous, as are the college presidents who have visited China; indeed, the leader's China visit comes close to being a 1980's rite of passage.

The phenomenon we are witnessing is in part a resurrection of an old New England relationship with East Asia which long precedes the Second World War. The first U.S. government exchange program, established during Theodore Roosevelt's presidency, was the Boxer Indemnity Fund, enabling many Chinese to study in the United States. The Yale China Association was founded in 1901. An integral affiliate but not formally part of Yale, it was asked to leave China in 1951, moving to Hong Kong to maintain its mission of advancing intellectual contact. Its endowment helps to provide support for faculty exchange, and it is recruiting English teachers to go to China. Dartmouth, although with interruptions, has been teaching Chinese since 1902. Even earlier, in 1876 the president of Massachusetts Agricultural College, now the University of Massachusetts/Amherst, assisted in the establishment of Japan's University of Hokkaido. That relationship was revived nearly a century later by an AID contract which provided for exchange between the two institutions.

New England has strong traditions in East Asian studies. The Centers at Harvard and Yale have long been designated as graduate-level resource centers under Title VI of the Higher Education Act. By associating people at other institutions with their activities and by preparing future faculty members, they have had a positive effect throughout New England and beyond. Harvard has a Program on U.S.-Japan Relations involving 30 researchers focusing on such topical areas as "coordination of economic policies" and "security relations in a global context." There is strength in the Five Colleges, Middlebury, and the Fletcher School. Bowdoin College and Boston University are making a strong push into Asian studies, and Wesleyan University is establishing a Center for East Asian Studies with a library and a lecture series; it had five majors in East Asian Studies in 1974, 30 in 1986. A new institution is promoting excellence in scholarship: Beginning in 1983-84 the

Wang Institute of Graduate Studies has been providing more than 30 post-doctoral fellowships annually in Chinese Studies for work to be done at colleges and universities.

Saint Michael's College is experiencing the current dynamism of Japanese relations more than most. The college's interest in Japan has grown steadily, in part because of the large numbers of Japanese who have participated in its program for teaching English to foreigners, an involvement which led to teaching English to executives from Sumitomo Metal Industries, which is linked to the Kansai Economic Federation. When college officials went to Japan to present an honorary degree to Kansai's chairman, Vermont's governor went too, and when the degree recipient thereafter gave Saint Michael's commencement address, he brought with him a delegation to explore business opportunities. Sumitomo has assigned a person to serve as liaison for Vermont business. Meanwhile, Saint Michael's, building on its success, has obtained a foundation grant to train its faculty in a variety of fields to incorporate Japanese substance in its curriculum. Japan has become the special country focus within the college's recently established Center for International Studies.

New England higher education is responding to the opening of China and the economic significance of Japan. In part it is building on old strengths, in part innovating, in part filling what had been a curricular void, and perhaps also in part addressing the sense of the importance of non-Western cultures which was stimulated by America's Vietnam experience. There is however, relatively light attention, although not negligible, upon India and Southeast Asia, the Philippines and Indonesia. The University of Hartford has exceptionally strong ties with Malaysia.

Other world areas

The Asian dynamic in New England is not matched by other overseas areas. There has not been a surge of intellectual interest in Western Europe, although New England is that part of the United States which is closest to Europe, its trade with Europe is exceeded only by its trade with Canada, all colleges and universities have faculty who have European expertise, and there are far more study abroad programs in Europe than in all other parts of the world combined. There is an increase in the number of students participating in study programs in Europe, and the focus on Europe remains strong in the curricula. Brandeis University recently created an interdisciplinary major in European Cultural Studies which is especially interesting: based in literary studies, it links study in any of, or combinations of, seven disciplines. It involves the greatest number of departments of any interdisciplinary concentration at Brandeis and has approximately 40 majors. The Brandeis exception aside, West European studies are essentially at steady state while attention to other parts of the world is increasing.

One new arrangement is noteworthy, however. A German-Dartmouth Distinguished Professorship Program, announced in 1987, is unique is that the German government has agreed to give Dartmouth $70,000 per year for 10 years to support the program, while Dartmouth will raise matching dollars and place them in a trust fund; the program should be fully endowed by 1997. This is the first time that the German Cultural Affairs Department has participated in an agreement with a foreign university.

Focus on the Soviet Union and East-West relations also has been largely at a constant state across New England, and also at a high level. Courses are many. Russian language study has been gaining. Moreover, there is increased

vitality in some places. At Harvard, the number of undergraduates concentrating in Soviet and East European Studies has more than doubled since 1978. At Harvard's Russian Research Center, 100 students applied for 15 places in 1985, whereas 30 to 50 did so a decade ago. The new Institute for International Studies at Brown will be strong in its focus on Soviet-American problems. Research interest in arms control issues is lively at Harvard, Yale and Brown. Several university presidents have stated their belief that arms control education is an important aspect of civic education, and the importance of this focus is commanding the attention of students on many campuses. At Tufts' Nuclear Age History and Humanities Center, more than 400 students take courses in nuclear disarmament each year. Yet while attention to this particular issue is likely, and enlivened by President Reagan's Strategic Defense Initiative, there is not a generally invigorating interest in the breadth of national security concerns.

Norwich University, given its military tradition, is one striking exception, yet in 1987-88 it became the first higher education institution to establish a training program for students who hope to enter the Peace Corps; this four-course, two year program will be an alternative to required Reserve Officer Training Corps programs. Another quite different exception is the 1987-1989 hosting of the International Peace Academy seminars on the University of Bridgeport campus.[3] Overall, it is apparent that attention to national security issues is being surpassed by interest in economic concerns and opportunities, whose focus is in other parts of the world.

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[3] The International Peace Academy conducts training seminars in peacemaking and peacekeeping on a global basis. Since 1970, more than 3,500 diplomats, military officers, policy-makers and academicians from 131 nations have attended IPA training seminars in Africa, Asia, Europe, North America and Latin America.

New England has one of the largest groups of Africanists in the country. They are largely scattered but have a strong network with a hub, Boston University, which has by far the largest and oldest African Studies Center. It has 15 core and 17 associated faculty. It has long been a Title VI grantee, joined in 1986 by Yale. The center has provided language training for people from other institutions, has approximately 10 Fulbright and Humphrey Fellows from Africa, and includes among its research associates scholars from Clark, Harvard, M.I.T., Northeastern and elsewhere in the region. Promoting cohesion across the disciplines is the exceptional circumstance that faculty members have offices in the center, not in the departments. There are initiatives toward direct institutional linkages in Africa. Five Colleges, Inc. is preparing to offer an undergraduate certificate program in African Studies and, as is the case with regard to other regions of the world, New England offers something extraordinary: Wesleyan University, in its World Music Program, offers instruction in African music, including drumming.

Middle Eastern Studies do not receive widespread attention in New England, and Arabic attracts few students. Harvard's program in Middle Eastern Studies is a resource center under Title VI. The University of Massachusetts has developed a Judaic and Near Eastern Studies Program, Brandeis has the Lown School of Near Eastern and Judaic Studies, and there are small programs at the University of Connecticut and The Fletcher School. Several colleges offer study abroad opportunities in Cairo and more in Israel, but strife in the region is a discouragement to study elsewhere, except in Turkey. Dartmouth, which is just starting to build a program in Middle Eastern languages, will begin offering Arabic and Hebrew in 1987.

In 1986 M.I.T. created a unique and indeed extraordinary Middle East Program at the graduate level focusing on technology, development and policy. Its conceptualization is derived from corporate experience and needs in the Middle East. It could well be a model for programmatic development relating to the long-term environment for corporations. The program "examines processes of socio-economic change, history, political issues, institutional development, capital flows, technological change, and business and investment patterns in the region." Instruction is provided by faculty from Political Science, History, the Sloan School of Management, Civil Engineering, the Aga Khan Program in Islamic Architecture, the Department of Urban Studies and Planning, and the Science, Technology and Society Program. In addition to a pattern of courses in their own fields, students must take two core courses: "Politics, Technology and Development in the Middle East" and "Technology, Business and Public Policy in the Middle East." They must also acquire familiarity with one of the region's languages and write their M.S. or Ph.D thesis on issues relevant to the Middle East. Students will be awarded a certificate in addition to the degree in their field. Initial student commitment has been impressive.

Latin American studies have much broader strength in New England. Both Yale and the University of Connecticut have federal support as Title VI Centers. The Five Colleges, with the University of Massachusetts at the core, has nearly 60 associated faculty members who offer an impressive variety of courses. Wesleyan University offers an undergraduate major in Latin American Studies, and Latin Americans are collectively the largest group of foreign students at Boston University. Saint Michael's College has been selected by USIA to participate in a model program for the education of Central American students, who will enroll in Saint Michael's intensive English language

training program and major in business. Three large state universities are each deepening their relationship with one country. The University of Connecticut's library resources and variety of relationships in Venezuela are of such magnitude that it is considering establishing a Center for Venezuelan Studies. With regard to Brazil, travel funds from the University Exchange Program of the Partners of the Americas is enabling the University of New Hampshire to develop a major faculty exchange program and collaborative projects with the Federal University of Ceara, located in New Hampshire's Brazilian partner state. Growing ties in education and research between the University of Massachusetts and Argentina led to the 1985 creation of a University-Argentine Program which involves faculty members from the Departments of History, Food Science and Nutrition, Chemistry, and Communications. Projects in food science and agricultural marketing are being conceived, and plans are underway for a joint MBA program with the University of Buenos Aires. These linkages are coinciding with Argentina's return to democracy. There is a major linguistic complement to Latin American studies: although Portuguese is not widely studied, there is instruction in Spanish wherever any language is taught.

Area studies programs involve large numbers of faculty members, e.g. 123 at UMass/Amherst. Yet because these faculty members hold appointments in the academic departments, the costs associated directly with the area studies programs are modest. UMass/Amherst has calculated that the cost of its five undergraduate area studies programs was $29,436 in FY 1986. The principal cost of the interdisciplinary area study programs is the faculty within the disciplines.

Two issues for area studies generally are the relationships with the disciplines and the relationship to functionalist approaches to international studies. An area approach increasingly requires linkage to issues and relationships which transcend the area yet are central to decision-making within it. For example, to study Scandinavia or Canada broadly is also to focus on the environment, NATO, the law of the sea, energy supply, and business relationships.

Derek Bok, in the 1987 Harvard commencement address in which he read from his "history" which looks back to the years just ahead, touched upon this point:

> On the research side Harvard decided to expand in area studies to establish major centers for every region of the world. It seemed as shortsighted to concentrate on only a few parts of the globe as it was to collect books in only a few languages or subjects. Since no one could tell which areas would prove important or intellectually exciting in decades to come, it was better to work actively in all of them. But it was the problem-oriented centers where the greatest growth occurred. International security and population centers had existed since the 1960s. In the 1990s new centers were added in a number of fields like food policy, natural resources, and environmental controls as these subjects grew more urgent to world order.....The largest center was devoted to economic and social development, reflecting the importance of global poverty and the growing tension between north and south.

Reinforced Interest in Canada

Canadian studies are a distinctive feature of New England excellence in international studies and are becoming significantly stronger. From colonial times, the New England connection to Canada has been stronger than that of other regions of the United States, and in recent years it has been reinforced by growing business relationships, migration into New England from Quebec, and interest in policy issues related to environmental protection, the management

of fisheries, the timber trade and free trade between the two countries.

About half of all Canadian studies activity in the United States is in New England, and both Canadian studies and Quebec studies in the United States originated in New England. The Yale and Harvard libraries have collected Canadian materials across two centuries; Yale's collection has perhaps become one of the four of five strongest in the world. At least 35 New England colleges and universities offer courses on Canada. An undergraduate can major in Canadian studies at the University of Vermont, which was the first to establish this degree-granting major, the University of Maine and at Trinity College (VT), and can minor in it, additionally, at Bridgewater State College and Plymouth State College. At least four courses on Canada are offered also at Bowdoin, Colby, Keene State, Middlebury, Smith, the University of Maine at Presque Isle, Southeastern Massachusetts University, and the University of Massachusetts in Amherst. There is also a graduate program at the University of Maine. In Vermont there is the Center for Northern Studies, a unique independent institution which offers an interdisciplinary focus on the Arctic region and, in cooperation with Middlebury College, a Northern Studies Program.

Under Title VI of the Higher Education Act, which provides support for area studies programs on a nationally competitive basis, the nation's only federally designated undergraduate Canadian studies program has been shared by the University of Vermont, the University of Maine and the State University of New York at Plattsburg, which have rotated administrative responsibility for their joint program. Another cooperative arrangement, the Five College Program in Canadian Studies, involves 45 associated faculty members and a variety of courses for students at Amherst, Hampshire, Mount Holyoke, Smith and the University of Massachusetts. The American Review of Canadian Studies is edited at the University of Vermont, and Quebec Studies at Dartmouth, while

the headquarters for the American Council for Quebec Studies is currently at the University of Maine.

Conferences on Canada are frequent and hosted by a variety of institutions. Plymouth State College hosts an annual Canada Conference; each year it has a different topic. Conferences are part of a broader new activity at Dartmouth. In 1987 Dartmouth established The Institute of Canada and the United States as part of its John Sloan Dickey Endowment for International Understanding. The Institute will re-found a series of conferences previously named for former Canadian Prime Minister Lester Pearson. The new annual Pearson-Dickey Conference will be under the joint auspices of the new Dartmouth Institute and the Canadian Institute on International Affairs at the University of Toronto.

Many New England institutions offer study programs in Canada. Travel is easy: from Burlington, Vermont, it is only 90 miles to Montreal, 180 to Ottawa. Thus, it is not expensive to take a political science class to Canada's capital or for Plymouth State College to conclude a summer workshop for teachers in Montreal. Plymouth State, as part of its new course in comparative marketing strategies, focused on Canada and took the class to Montreal on a field trip.

There is a new trend in Canadian studies, moving beyond its origins in the liberal arts, i.e. history, political science and the French language, toward economics and business. The University of Vermont, in 1984, added a professorship in Canadian-American Business and Economic Relations. The incumbent is focusing on the economic development strategies of the Canadian provinces and the New England states. In the last three years, the university has held three conferences on Canadian-American business issues. Among the several new courses on Canada at the university is one on Canadian natural

resources in its School of Natural Resources.

The University of Massachusetts/Amherst in 1987 established an Institute for North American Trade Relations to undertake research on the trade relationship between Canada and the United States. In addition to promoting doctoral dissertations, colloquia and lectures, the Institute will prepare, for business schools, teaching modules offering comparative perspectives on Canadian and American management.

The most extensive fresh activity is now occurring at the University of Maine, which plans to fill five new tenure track positions in Canadian studies in 1987, one of which will be in business, another for a forestry economist who will specialize in the forest trade relationship with Canada. Maine has the country's largest Canadian Studies program, with a core group of 40 faculty embers. A 1985 survey of faculty Canadian-related activity commissioned by the University's president indicates more than 100 individuals involved in research and nearly 130 in public service and outreach activities related to Canada. Almost 70 faculty members taught more than 100 courses having Canadian content, their combined enrollment exceeding 2,000 on a campus of 12,000 students. Ninety students in 38 degree programs graduated with 15 or more credit hours in Canadian courses. One section of the survey document lists trade-related Canadian activities, which are varied and numerous. Quebec studies and Franco-American activities are more extensive here than at any other American university. Overall, Canada-related projects and campus-based conferences are numerous. The new faculty positions signal the University of Maine's intention to be nationally prominent in Canadian studies.

In 1986, the University of Maine signed a comprehensive program for cooperation and exchanges with the University of New Brunswick, establishing the most extensive relationship between any American and Canadian unversity.

These two institutions have reduced tuition barriers between themselves and have agreed that one another's faculties may serve as examiners in doctoral programs.

Programs labelled "Canadian Studies" are far from being the only activity focused on Canada in New England colleges and universities. At both Yale and Harvard, the framework is North American comparative study, with emphasis upon research. Their focus is not upon a distinctively Canadian-focused curriculum, but rather upon integration of Canadian substance into the academic disciplines and/or integration of a Canadian focus with the policy aspects of economic, environmental and other relationships. Harvard's Center for International Affairs has been host, since 1979, to the University Consortium for Research on North America, a partnership of Brandeis, Harvard, Tufts, and the Fletcher School of Law and Diplomacy promoting policy-oriented scholarship. Other strong activities also complement Canadian studies. Approximately 20 people in New England academic settings are focusing on Canadian or trans-boundary environmental issues, but they are not part of Canadian Studies programs. An even stronger functional connection will be discussed in the following section on "New England and the Ocean." Because so many faculty members in different fields are interested in Canada as well as involved with their disciplines, Canadian substance enters a variety of courses within the disciplines and professional schools in New England.

The Canadian government is investing in Canadian studies in the United States, supporting conferences and providing grants for course development and research. Sometimes it makes available seed money for program development; for example, the Canadian Department of External Affairs will be contributing $250,000 across 1987-1991 toward the campaign to raise at least ten times this sum for the new Institute for North American Trade Relations at UMass/Amherst.

In Canada there is a Business Fund for Canadian Studies in the United States, started in 1980 and supported by 47 Canadian corporations. It provides support toward meeting the "start-up" costs for teaching programs in Canadian studies, with an emphasis on business and economic relationships. In New England its assistance has included a small grant to the University of Massachusetts to expand a study of presidents of large corporations to include Canadians and a major grant to the University of Vermont to create its professorship in Canadian-American Business and Economic Relations.

New England and the Ocean

The combination of New England's economic, academic and international interests extends to the ocean, which five of the six states border. Indeed, New England mileage of sea border exceeds the land borders of the six states. In national perspective, New England's seaward interest is distinctive. From the earliest times, shipping has carried trade and brought profit to New England. It is the least agriculturally focused part of the country, and the value of the fish and shellfish catch exceeds that of all its land-based meats. Marine science is one of the leading fields in proposing innovative research projects that could lead to major new economic activities.

In the marine sciences, New England institutions have world class status, with particularly strong and multi-faceted capabilities at the Woods Hole Oceanographic Institution, the Universities of Connecticut, Rhode Island, Maine and New Hampshire, Southeastern Massachusetts University, the Marine Biological Laboratory at Woods Hole, and the University of Massachusetts/Boston. New England produces 47% of all U.S. graduates in marine science.

As the ocean flows by the continents, it follows that marine science is in large part global or regional in nature, for example in its concerns with ocean circulation, which is related to weather prediction, fish stock assessment, waste disposal, and innovative energy use.

New England marine scientists consult worldwide and do work which most countries have neither the scientific nor the technological capabilities to do. Many countries request advice on policy as well as technical issues, and frequently on fisheries development and management. Several institutions have cooperative international programs, e.g. the University of New Hampshire in

Brazil, the Woods Hole Oceanographic Institution in four South American countries as well as in the Gulf of Aqaba, and the University of Rhode Island with three universities in Malaysia.

Interest in the economic potential of the marine sciences and of the ocean is increasing. The main focus is fisheries, the basic industry: the value of New England's fish catch in 1984 was $433.5 million and in 1985 $419.4 million, not counting any value added by subsequent processing. Aquaculture and marine biotechnology are leading to new and revitalized industries based on knowledge ranging from how to accelerate the growth rate of shrimps and improve fish stock to the University of Connecticut's finding that the adhesive of mussel shells can be utilized in the wet environment of dentistry. There is long-term interest in the ocean floor, the recent decline in the metals market notwithstanding, as the floor's manganese modules contain cooper, cobalt, and nickel in addition to manganese.

The imagination has been captured by the possibilities of hydrocarbon discoveries, adapting technologies from New England's submarine and other defense-related technologies, developing waterfront cities, and creating, by genetic engineering, marine organisms that can detoxify wastes. Breakthroughs in knowledge are increasingly likely with the utilization of new technologies including remote-sensing equipment, underwater imaging systems and vehicles, acoustic tomography, and supercomputers which will make it possible to model oceanic circulation. New England's fisheries industry entered the space age when the University of Rhode Island utilized information gathered by satellite to produce a sea-surface temperature map of southern New England. The oceans, like outer space, are a new frontier, and maybe especially New England's frontier.

In Massachusetts, the Dukakis Administration has proposed new Centers of Excellence directed toward advancing the "competitive intellectual edge" toward the next generation of high technology. One of the four disciplinary areas selected, along with polymer science, biotechnology and photovoltaics, is marine sciences. While all these fields will be characterized by international competitiveness, international relations affect marine activities especially:

* International law affects New England's activities in may ways. During the last decade most countries, including the United States and Canada, adopted a 200-mile Exclusive Economic Zone (EEZ). Its impact extends beyond the control of ocean bottom resources to the activities of New England fishermen. Across two centuries American and Canadians fished in one another's waters. Depletion of stocks led to issues of fisheries management. The EEZ led to a maritime boundary dispute, resolved in 1984 when a Special Chamber of the International Court of Justice divided the Gulf of Maine-Georges Bank region between the U.S. and Canada. Issues of fisheries management have remained. New England university expertise has been involved, on an interdisciplinary basis, in both the legal and management issues. Soon after the establishment of the EEZ, the University of Southern Maine established an Institute of Marine Law, which focuses on such issues and has a collaborative project with the University of Halifax on environmental issues.

* The marine research interests of New England academic institutions are affected by the Law of the Sea Treaty, which requires the permission of the adjacent coastal state to engage in research in approximately 42% of the world's oceans, a mass of territory approximately equivalent to the planet's land area. A large world map prepared at the Woods Hole Oceanographic

Institution strikingly illustrates the jurisdictional impact. The areas covered include straits, archipelagic waters, the EEZ, and the continental shelf wherever it extends beyond 200 miles. These are the economically as well as the scientifically most significant parts of the ocean, the regions which account for 90% of the fishing, the greatest variability, the most accessible hydrocarbon and other mineral resources, and nearly all of the environmental problems which raise issues of protecting and monitoring.

Doing scientific research will to a major extent involve academic institutions in governmentally-negotiated international agreements. Some kinds of research may involve several countries. Agreements can be conditional. Already there have been difficulties, and it has become clear that marine science is vulnerable as an easy target in a wider ambit of international relations.

Government can be promotive of New England's special niche in the marine sciences, much as it has been in agriculture. In parallel, but a century apart, each of these fields has gained from a New Englander's initiative. In 1862 it was Justin Morrill of Vermont, the one New England state not bordering the Atlantic, who wrote the Act establishing the Land-Grant Colleges; in 1965 it was Senator Claiborne Pell of Rhode Island, which has less land than any other state, who initiated the Sea-Grant Act. This legislation has been a boon to the marine sciences and consideration of the economic potential at sea.

Perhaps nothing better illustrates the interdisciplinarity and broad relevance of this field than the following breakdown, by discipline, of the 295 University of Rhode Island graduates who received Sea Grant support between 1970 and 1983;

Biology	64
Engineering	52
Economics, Business	49
Aquaculture	35
Seafood Processing	26
Chemistry	22
Pharmacy	18
Law, Sociology, Political Science, Geography	17
Fisheries Technology	7
Geology	5

The early Sea Grant vision had an international component and office, no longer funded. The Agency for International Development had not been effective in marine development, and there was an early notion that it would be possible to export technologies to developing countries. On balance, however, probably more technologies were brought to New England from the North Sea countries and from Japan, which for example has led in utilizing fish paste. Nonetheless, many countries seek help from Sea-Grant institutions on fisheries development as they do from Land-Grant institutions on agricultural development. Given change in the international legal framework, what pointedly now is at issue is whether the U.S. Government will create an office to facilitate marine science access and cooperation internationally.

We may anticipate that New England will have a growing set of internationally competitive business developments and international relationships through the marine sciences. From this perspective the marine

sciences illuminate a broader point: the emerging global framework for New England's and America's activities are simultaneously economic, technological, scientific, political and educational. Conceptualizations of international education which address all these elements will be most in league with the future.

Foreign students and study abroad

Higher education is one of America's greatest assets globally, respected for its leadership in research, its programmatic variety and flexibility, and for its independence and the freedom of inquiry it represents. Other than the democratic order itself, probably no other sector of American institutions is so closely linked to the aspirations of people in other countries. Millions of foreigners have been educated in the United States. Currently there are more than 350,000 foreign students in this country; there may be as many as 1,000,000 by the end of the century. Higher education has become one of America's major export industries. Foreign students spend approximately $300 million per year in New England alone. Foreign alumni are growing rapidly in numbers, provide a network of contacts, and often join Americans in professional and commercial relationships.

New England is a magnet for foreign students, attracting approximately 25,000 of them. Nearly 80% of them are in private institutions, 70% of them in Massachusetts, and nearly one-third at four private universities in Greater Boston. The 30 New England institutions enrolling the largest number of foreign students in 1985-86 were:[4]

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[4] Figures are from Open Doors 1985-1986 (New York: Institute of International Education, 1987).

Institution	Foreign Students
Boston University	2,493
Harvard University	2,042
Northeastern University	1,888
M.I.T.	1,886
University of Massachusetts/Amherst	1,393
Yale University	835
Bunker Hill Community College	721
University of Connecticut	608
University of Lowell	606
University of New Haven	558
University of Bridgeport	553
Brown University	539
University of Hartford	521
Tufts University	489
University of Rhode Island	448
New Hampshire College	414
Boston College	352
Wentworth Institute	306
Brandeis University	305
Worcester Polytechnic Institute	283
University of Massachusetts/Boston	250
Clark University	233
Suffolk University	203
Babson College	192
Roger Williams College	176
Dartmouth College	174
Smith College	163
University of New Hampshire	156
Rhode Island School of Design	152
New England Conservatory of Music .	150

Most of the students are non-western: South and East Asia, 43.7%; Europe, 15.5%; the Middle East, 13.1%; Latin America, 12.6%; Africa, 8.7%; Canada, 5.7%; and Oceania, .7%.

New England has the highest percentage from Europe of any region of the United States (the phenomenon of growing numbers of Asians in New England is discussed on pages 55-56 of this paper). Most foreign students are undergraduates; approximately 35% are graduate students. The overwhelming majority are in engineering programs, business and management, mathematics and computer sciences, i.e. they are in the United States for practical and technical studies. Of these who earn doctorates in scientific and engineering fields, a large proportion intend to remain in the United States and do become employed here.

Many New England institutions want more foreign students, for several reasons. One line of reasoning is: the United States has entered a global era; it is the function of education to prepare people for the world in which they will be living; little is more predictable then the accelerating impact of things international upon the lives of student-age people who will be only in their thirties as we enter the next century; educational strategies must be devised to provide realistic perspective about the rest of the world; preparing people to be effective in the global era is a matter not only of substance but also of attitude conditioned by familiarity with other people; it is important to devise ways to promote understanding of other people and how to relate to them; accordingly a college or university should provide opportunities to become acquainted with foreigners and not to do so is to fail to provide the kinds of exposures that are appropriate to the era, and to fail to build communications among future leaders.

There are also more immediately pragmatic reasons for wanting foreign students. The economic reasons are that as the traditional New England student age group declines in numbers, international and adult markets become more important to the campuses, and those coming from abroad, to the

overwhelming extent that they pay their own expenses, do not require student financial assistance. Moreover, foreign graduates can be helpful in providing successor students from their homelands as well as contacts for internship experiences abroad for American students, and foreign students sometimes provide the critical mass needed to sustain engineering programs.

Many interviewees have suggested that a critical mass of foreign students, perhaps 10% of total enrollments, is needed to have the desired interactive effect on campus and that it is important to have global representation rather than a disproportionately great number from one or two countries. The University of New Hampshire assigns foreign students housing throughout the dormitory system in order to promote mixing with Americans. At Clark, 8-10% of the student body is foreign, at Dartmouth 10-12% in the MBA program. The University of Connecticut, Bentley College and Saint Michael's College wish to increase their number of foreign students. The University of Bridgeport Board of Trustees has mandated 15% as a goal; this university's foreign share of enrollment was 10% in 1986-87. It has representatives marketing on several continents. The University of Hartford also has been increasing its international recruiting. Lesley College has a special foreign student body: as the world's only institution offering a Ph.D in Expressive Therapy, involving the fields of art, dance, music and theatre, it serves a considerable number of Israelis who come in each of three summers in pursuit of a degree or certificate.

Having foreign students requires support service, including counseling, medical insurance, and separate admissions procedures. Particularly important as an attraction to foreign stuents and a contribution to their success is offering English as a Second Language (ESL). The University of Hartford has an English Language Institute, enrolling 50-100 students per year, mainly in business and engineering. The program employs four instructors, some tutors and a laboratory coordinator. At Bentley College, programs include second-language designated sections of freshman communications courses. The University of Bridgeport has a large program. Saint Michael's and the Experiment in International Living's School for International Training, both of which have large ESL enrollments, also train ESL teachers. In ESL, the Experiment has served more than 10,000 people at American locations and many times as many abroad.

The selection of foreign students has become a significant concern at several institutions. Harvard wishes to ensure that its processes result in enrolling the very most promising. It is a problem even for much smaller institutions that they must evaluate student records from all kinds of institutions around the world. Williams College reports that foreign inquiries increased from 756 to 1,051 from 1985 to 1986, resulting in the latter year in 350 applications, 65 acceptances, and 25 enrollments constituting 2% of the class of 1990. The University of Bridgeport has articulation agreements with institutions on several continents which facilitate transfer to the university.

In addition to the problem of judging applicant quality and recruiting superior students, there is an issue of what proportions of foreign students should come from various countries. Interviewees indicated that the most desirable situtation would be to have a broad global mix, a low proportion of enrollment from countries whose political upheaval may cause disruption in tuition payments, strong educational marketing in areas of economic growth which can yield a variety of connections including business internships, and a plan to build exchange programs as part of broader patterns of relationships with carefully selected foreign institutions. Northeastern University is illustrative of a new mode of strategic thinking:

* Northeastern University is probably unique nationally in conducting international corporate-style political/economic risk analysis studies as an aid to long range planning of the foreign student body. During 1980-81, Northeastern's Office of International Affairs began to acquire and monitor political, economic and educational data regarding countries of potential interest for Northeastern's international outreach efforts. These risk analyses followed the Iranian and Lebanese civil disturbances. At the time, more than 700 of Northeastern's 2,100 foreign students came from these two countries. As a private university, Northeastern is significantly dependent on tuition revenues for its operational budget. Had the funding sources for these 700 students been cut off, there would have been substantial impact upon the university's financial situation. This circumstance, along with new interests in overseas operations, led to the political risk research.

Northeastern's political risk analyses, much like their counterparts in the corporate world, involves an ongoing process of monitoring information from State Department, Commerce Department, and other U.S. sources. In addition, the analysts have been surveying approximately 25 international

periodicals, newspapers and special economic forecasting reports. Northeastern-specific country risk studies were compiled with analyses by six categories: political factors, economic factors, foreign corporate environment and presence, educational factors, alumni presence, and relevant trends.

Comparative country ratings were accomplished after developing a country analysis profile based on the assignment of weighted point scores for each analysis variable. Countries also were rated in comparison to other countries from the same geographic area, countries of similar size, and countries of comparable decision interest. Each country analysis report presented the rating results and a data summary for the variables assessed. Ratings include, in descending order, four star, three star, and two star assessments. Only countries attaining four star and three star status were deemed to be of current interest for Northeastern University's international outreach decisions.

These assessments indicated that the strongest markets for Northeastern's educational services were to be found primarily in the Asia-Pacific region. As a result of these findings and in order to partially offset the then predominantly Middle Eastern composition of the international student body, Northeastern staff undertook recruiting trips to the Far East in order to recruit students and to visit multinational corporations and local firms to explore the possibilities for developing cooperative education placements for students from the Far East; Northeastern places all students, including foreign students, in professional work experiences as an integral part of their undergraduate program. Similar trips were subsequently scheduled, following the political risk assessments, to Europe and Latin America. International student geographic distribution statistics for the 1985-86

academic year showed a 38% increase in Asian students and a 36% increase in European students. Latin American enrollments declined as predicted largely because of the devaluation of local currencies against the dollar.

Finally, another issue is tuition rates for foreign students. At state universities, which in New England attract fewer foreign students than do private institutions, there is discussion of whether foreign student service in education or community programming or consultation to businesses can be arranged, as in Oregon, as a condition of qualifying for in-state rates of tuition fees.

Study and internships abroad

Study abroad by New England's students is every bit as lively a development as the attraction of foreigners to New England. The Junior Year Abroad program was first introduced in 1923 at Smith College, which sent students to Paris to learn French. Other women's colleges followed, and thereafter most institutions. Many programs managed by one college or university are open to students from others. From a programmatic standpoint, there are opportunities to study abroad for every qualified student in New England. The School for International Training (SIT) has enabled more than 5,000 individuals from numerous institutions across the United States to undertake academic study abroad; SIT is the national leader in offering such programs in Third World countries.

New England's private colleges typically have study abroad programs. The emphasis, in keeping with their mission, is on the liberal arts and foreign language learning. Overwhelmingly the activity is in Europe. At Smith,

Wellesley, Colby, Middlebury, Tufts and Williams, approximately a third of the student body goes abroad, at Simmons 20-25%; from Brown, 300 students per year. At Wellesley, participation has doubled from 86 to 178 between 1980 and 1986. Boston College's Junior Year Abroad Program will be expanded. At Middlebury, participation is limited to about one-third of the student body because not more demonstrate the foreign language competence required for inclusion in its programs in five countries. Two-thirds of Dartmouth's students spend at least a term abroad, half of them in a foreign language setting; they live with local families. Tufts aspires to having all of its undergraduate students studying abroad for a semester within five years. Study abroad is "infectious" at these institutions, as the returning senior year students influence the sophomores. Some of these institutions manage their own programs in order to ensure curricular coherence and to provide overseas experience for their own faculty.

New England College encompasses two campuses, one in New Hampshire, the other in England, with integrated curricula. Half of the New Hampshire students at some time study in England but do not at any one time compose more than 40% of the student body at the British campus. Approximately 35 students from other New Hampshire institutions, public and private, enroll at the overseas campus under an extraordinarily inducive arrangement whereby students of any college belonging to the New Hampshire College and University Council are enabled to take courses at other member colleges at the price of home campus tuition.

The explosive growth in program development that is characteristic of the region may be illustrated by the change at Boston University. In 1978 only 21 of its students went abroad on study programs, all of them on an ad hoc basis as participants in other institutions' programs. Soon thereafter Boston

University developed short-term summer study abroad with a curricular structure. In 1982 it joined the International Student Exchange Program (ISEP), based at Georgetown University. A reciprocal exchange program within a network of American and foreign institutions, ISEP conveyed the extra benefit of bringing to Boston University students from countries which otherwise were not sending them. In 1983 the university developed semester programs in Madrid and Grenoble, which are open to students from other colleges. Each has been managed by a Boston University resident director who teaches a course on Spanish or French civilization. Language training is emphasized: there is a language prerequisite to participation, learning is reinforced abroad, and students typically take more language courses after returning. In 1987 a similar program is beginning in Padua. By 1986, the number of study abroad programs of various kinds with which Boston University was associated had increased to 15. In 1984-85, Boston University had 315 students abroad, in 1985-86, 575, and in 1986-87, probably 800. Of the 1985-86 group, 150 were from other institutions. In that academic year, more than 200 Boston University students participated in non-Boston University programs. This case illustrates a developmental pattern.

Collaboration between institutions in offering study abroad is another pattern. It is common in the development of programs in Asia for which many institutions lack the critical mass of students needed to operate a program alone. Bowdoin, Bates and Colby have a program in Sri Lanka. University of Connecticut students participate in a University of New Hampshire program in Salzburg. Five Colleges, Inc. has been a catalyst for student interest in study abroad. Community colleges offer study abroad programs on several continents through a consortium for international studies. Under this

program, 25 students from Cape Cod Community College were in five countries in 1986-87. In the field of international business, five land grant institutions, namely the Universities of Connecticut, Maine, New Hampshire, Rhode Island and Vermont, have a joint program in Grenoble. While its administrative headquarters is at the University of Connecticut, the five universities take turns in sending their own professors to Grenoble to run the program.

The New England Board of Higher Education manages the New England side of the New England/Quebec Student Exchange Program, in which seven Quebec and 36 public and private New England colleges and universities participate. This program enables New England students to study at Quebec institutions while paying tuition at their sponsoring home campuses. The number of participating students from the two neighboring regions combined nearly doubled from 1985-86 to 1986-87, from 32 to 59, and includes students in a broad variety of fields.

Every major state university in New England has programs abroad, but the proportion of the student body participating is far lower than is common at the private institutions. It is at its peak in the humanities and social sciences, at perhaps 10% of these students. Required course sequences and lack of curricular flexibility are a structural barrier to participation in engineering and some other fields, in some places including business schools. The University of Massachusetts/Amherst International Programs Office in 1984 stated its goal of increasing study abroad opportunities so that at least one-fifth of all students would have a chance to study abroad within a decade. It offers an extraordinary array of programs ranging in focus from language and anthropology to chemistry, fine arts and physical education. In 1985-86, 485 of its undergraduates ranging across 55 majors studied abroad in 52 programs in 18 countries, 310 of these students in programs administered by

UMass/Amherst. Fitchburg State College is beginning summer and junior year abroad programs in four European countries in 1987, stating that for some students the new programs will be an opportunity "to acquire the language skills and cultural awareness needed in today's global economy."

It is an internationalized educational philosophy that is driving these programs, the belief that it is important for students to learn about other peoples by going abroad and that the adaptive and linguistic skills developed can be helpful to them in a global era. It is not convenient for colleges. Arrangements are cumbersome, financial losses are absorbed as beds on campus are sometimes empty, and the removal of junior year student leaders and so many others from campus activities can leave a void and detract from campus cohesion. Nonetheless, colleges support these programs increasingly because growing numbers of students want the experience and colleges believe they are educationally important.

Beyond increased involvement, there are three other trends in the study abroad field in New England. One is an increase in non-western programs, still a small proportion of the total. Most new programs are in Asia, buttressed in part by the interest of Americans of Asian descent. The second is fresh thinking about where to have programs and why. Many programs were created across the years as a base for faculty members' personal studies, often in the field of foreign languages. The origins in many cases were not in strategic linkage to institutional objectives. Some institutions are pondering whether their programs should be part of a broader fabric of relations with a foreign institution, to include research and faculty exchange. Many New England institutions have a variety of formal relationships with foreign universities on other dimensions, for example Clark University and the University of Connecticut each have 11.

Indicative of the trend toward strategic thinking and comprehensive sets of relationships with foreign universities is the UMass/Amherst study, The Whole is Greater than the Sum of Its Parts (1987), which sets forth 11 criteria to be considered in evaluating the potential of a program in terms of a cost-benefit ratio and its performance over time. They are: the country's importance, the institution's significance, the commitment of top administrators, the interest of distinguished faculty, the potential for faculty exchange, the potential for significant conferences involving also third parties, the availability of contacts at the upper level of both governments, the likelihood of attracting external funding, the potential for a continuing exchange of students, the ease of visitor exchanges, and the opportunities for economic development--trade and business investment--between the two countries.

Thirdly, and particularly in the field of business, there is a fresh trend toward providing experience which will contribute directly to one's professional growth. Business student participation in study abroad programs is increasing quite generally as the experience is becoming regarded as pertinent to career development. To some extent, study abroad is probably going to become more tailored to particular interests than in the past.

There is increasing attention to providing overseas internship experience. At present, probably not more than one percent of study abroad participants gain internship or cooperative education experience. Programs antedating 1985 are rare. At Dartmouth, Dickey Endowment funding enables some 20 students each year to have had opportunities to intern in United Nations agencies around the world. Lesley College, for the M.A. in Intercultural Relations which began in 1981-82 and now has 70 students preparing for careers in culturally diverse human services, requires all students to do internships

in a worldwide intern program. Northeastern turned over its intern program to Boston University in 1986 while retaining its international cooperative education program involving perhaps two to three dozen students annually. The University of Bridgeport is seeking to develop international cooperative education, which involves students holding a regular position for a short period of time; a few dozen of its foreign students have been place with, primarily, American firms. Northeastern is pioneering international cooperative education for its foreign students, sometimes for multinational corporations which also have a site in New England; this program has the advantage of re-socializing students into their own cultures while avoiding, as is a recurring problem in some fields, the limitations associated with national security classification within American companies.

Boston University is developing a many-faceted set of undergraduate internship opportunities in Britain. It started with four programs: Business/Economics, Politics, Journalism/Communications, Art and Architecture. In 1987 it is adding Engineering, Health and Human Services, and Visual and Performing Arts. The Boston University model combines curriculum with internship: students receive 12 credits, only four of which are for the internship experience, yet intern four days a week. Each program has a British resident coordinator, British faculty, and one Boston University faculty member to monitor, tutor and evaluate. Boston University operates this program as a national intern program, and the tuition is not the same as at Boston University. Seventy institutions' students have participated; one-third of the students have been Boston University's. Although the ideal is to have no more than 40 in any one of the programs, Business/Economics has had 45.

The trend toward professionally related overseas experiences in the business field may be illustrated by two other models, one linked to formal study, the other to project-focused internship. In the University of Connecticut's Mannheim program, students take eight weeks of German at a Goethe Institute as a prelude to taking courses at the University of Mannheim approved as appropriate by the University of Connecticut School of Business Administration.

Babson College has an International Management Internship Program at the MBA level. Its operation illustrates the complexity of managing such a program. For each student a project is identified which utilizes that student's particular analytical and problem-solving skills, e.g. in finance, marketing or management information systems. Each project must meet the need of a host firm, and each is to result in a report. The requisites of successfully managing such a program are several: there must be an expert facilitator to negotiate arrangements, a mentor in the host company, and preliminary guidance at Babson on the preparing of a suitable report. A single coordinator probably cannot manage arrangements for more than 35 participants in such a labor-intensive program, and that coordinator has to be able to operate at a high level in dealing with prospective firms. Babson's program includes projects in several countries. It has been expanding in both the number of sites and the number of students, doubling in 1986 to perhaps 34. Several firms have had successive Babson students. Among the contact leads are foreign-owned companies in New England.

Business deans report numerous inquiries about internship possibilities. At most institutions, internships are arranged on an ad hoc basis. It is apparent that demand greatly exceeds the supply of opportunities.

New England Library Resources

New England university libraries spend a substantial proportion of their acquisitions budgets outside the United States.

The proportion of expenditures for foreign acquisitions is: Boston University, 20 percent; Tufts University, 20 percent; Brandeis University, 22 percent; the Massachusetts Institute of Technology and the University of Massachusetts-Amherst, each nearly 25 percent; Clark University, 26 percent, and Yale University, 50 percent. There are also significant special collections at some of the region's liberal arts colleges, for example in support of outstanding programs in foreign language instruction. The annual expense of foreign purchases is considerable, Yale's alone approaching $2.5 million. In terms of usage, UMass/Amherst reported that 21% of books in circulation were in non-U.S. categories in FY 1986.

Harvard has provided a different measure: The Harvard College Library, consisting of all the arts and science libraries (including the Widener Library but not the professional school libraries), in 1984-85 purchased 79 percent of its titles outside the United States. All of the figures above are institutional "informed guestimates" and probably less precise than the numbers indicate. In general, the largest and most research-oriented institutions spend not only the largest sums but also larger proportions of their budgets on foreign acquisitions.

Budgets for foreign serials and periodicals tend to be larger than budgets for monographs. For example, the University of Hartford, which has a library of 350,000 volumes, spends about 20 to 25 percent of its periodicals budget abroad, but maybe only 5 to 10 percent of its monograph budget abroad. This is a somewhat typical pattern, fortified by another: Whenever overall budgets

are tight, libraries tend to avoid discontinuities, and so are somewhat inclined to continue buying journals rather than books.

In an era in which knowledge about what is happening in other parts of the world is becoming increasingly important to us, overseas purchasing is essential. Such purchasing has always been natural as, most fundamentally, it is the function of universities to probe and teach about the universe of phenomena and ideas; theory, method, and the academic disciplines transcend national boundaries.

However, we may anticipate that foreign purchasing will increase. One reason is that the production of social science and historical literature produced abroad has been increasing at a rapid pace. The number of countries producing literature of all kinds has increased dramatically; this is a result of the creation of new countries and the increased investment of most countries in higher education and the advancement of their own cultures and literatures. Also, the social sciences have become worldwide, so that theories and hypotheses developed in some countries are tested in others, and interest in such research becomes transnational. Overall, there has been an explosive expansion in the number of foreign books and journals, many of them important to our understanding of other peoples and countries.

The second reason concerns science. A quarter century ago, two-thirds of the world's science was American, whereas now, in partial reversion to the pre-World War II pattern, perhaps two-thirds is carried out abroad. American libraries need to keep up with this change in order to enable our scientists to be knowledgeable about developments in their own fields, and so that our science will be more than parochial. That this is essential for the

international competitiveness of the American economy has been recognized in Washington. The Congress has passed and President Reagan has signed into law the Japanese Technical Literature Act, which authorized the expenditure of funds to improve the "availability of Japanese science and engineering literature in the United States."

Thirdly, New England's library resources are a major asset in attracting talented people from all over the world to our academic institutions, enabling them to be at the cutting edges of their fields. These resources are increasingly important aspects of New England's comparative advantage at a time when New England products and services are knowledge-intensive, producing innovative technological goods in direct competition globally, and providing sophisticated professional services internationally.

It will probably be necessary to increase the foreign share of at least some of our libraries' acquisitions in the years ahead. It is clearly predictable that the acquisition of Asian materials will increase, and indeed this is happening at some New England college as well as university libraries.

However, libraries face two dilemmas. First, as the dollar now buys less abroad then it did two years ago, libraries are experiencing a sharp increase in expenses which is likely to continue; some kinds of purchases must be discontinued unless the overall budget grows in a compensatory manner. This means that decision criteria have to be developed and difficult choices must be made. Secondly, there are limits to storage. Both of these considerations lead to thinking about inter-institutional cooperation, especially with regard to materials which are likely to become obsolete quickly or to have few readers. It will remain essential for this function of providing creative, intellectual leadership that the region's major state universities and its

private "national" universities, which are indeed international universities, make extensive purchases abroad.

It is managerially complicated to buy materials abroad, especially when one deals with payments in foreign currencies. Some universities or groups of institutions have buyers abroad and long-term accounts. With regard to serials, the world's largest purchasing agent is Faxon, located in Greater Boston. Faxon serves 30,000 libraries worldwide, including 120 of the 121 U.S. libraries having more than one million volumes; it is the world's largest source of orders of scientific, technological and medical journals and serials. Faxon collects approximately $300 million per year, of which $25 million is international business. It is a sign of the times that Faxon, which was long known as the Boston Book Company and as such has an ancestry which goes back more than a century, now utilizes high technology processing in support of global operations. Many New England libraries present order lists to Faxon.

The individual seeker of library resources in New England is well served by a system which enables borrowing from academic institutions and public libraries beyond one's own community. For example, all libraries in Vermont are linked in a way that permits a variety of needs to be met within a wider system. Requests from any library are communicated through an electronic mail system, EasyLink, to regional libraries within the state. If the request is not met at that level, it moves to the statewide level within the Vermont Resource Sharing Network, which the Vermont Department of Libraries oversees.

If it is necessary to "elevate" the request beyond Vermont, the request goes to the On-LIne Computer Library Center, Inc., which is based in Columbus, Ohio and is developing a growing capability to make a search worldwide.

Normally, the inter-library loan is next made by the nearest library having the item requested. Requests for foreign materials can be handled in this way and usually can be met within two weeks. In this system the major libraries have two functions: to hold specialized materials for their own individual user needs and to meet requests from less specialized libraries.

The internationalization of library resources is necessary to support change within all three higher education functions; research, curriculum and service. For colleges and especially for universities, management of this library capability is a special and complex challenge as well as a centrally important basis for the leadership of New England institutions and their contribution to New England's economic competitiveness in a global era.

Conclusion

The impact of economic globalization on higher education is quickening and growing. It is a general phenomenon, occurring in one form or another at every institution examined. It is reflected in the thinking behind the new comprehensive planning for the international dimension of colleges and universities, in changes within the business and liberal arts curricula, in the resurgence of foreign language study, the fresh focus on Asia and the reinforced interest in Canada, the acquisitions of libraries, and the strategic thinking about both foreign students and study abroad. It is clear also, however, that these changes are at the early stages of development, the focus of fresh initiatives, and still taking shape.

At this stage of institutional development, sharp contrasts and obvious needs are apparent:

* there is a strong student demand for courses in international business, yet there are considerable shortages of international business faculty and case study materials.

* international courses and programs in the liberal arts have growing enrollments and most liberal arts students go to work for firms, yet nowhere is there an introductory course on the global economy from a business perspective.

* foreign language enrollments, after a decade of decline, are sharply on the upswing, yet very few business students study a foreign language.

* the currently most vital geographic area study programs coincide with areas of business dynamism, e.g. East Asis, yet area studies programs rarely include business perspectives.

* study abroad opportunities are generally available, yet there are very few internships in businesses abroad.

* there is growing interest in international business in the business community, yet there is very little by way of continuing education or executive development programs in international business.

* numerous institutions are undertaking comprehensive planning for their international dimension, yet such planning typically lacks focus on the global economy.

* although higher education has international resources relevant to the business community and foreign investment tends to be attracted to areas offering educational advantages, New England communities have not designed business-higher education partnerships for their international economic development.

This paper began with this question: Are New England's colleges and universities adapting their curricula and activities to provide the new understanding and competencies required in the global economy? In the main, that challenge still lies ahead.